

# PEPTIDE MODIFIERS

*Fatty Amino Acids and Lipidated Building Blocks*



## **Blockbuster Building Blocks**

Fatty acids are key components in all biological systems and play a crucial role for normal functioning at all levels of an organism.

**pages 1 – 3**

Azide-/alkyne-functionalized fatty acid building blocks for Click chemistry.

**page 1**

Peptide modification with fatty acids increases *in vivo* stability.

**page 1**

Blockbusters Liraglutide, Semaglutide and Tirzepatide.

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Version: IF15\_4

## Peptide Modifiers

### Fatty Amino Acids and Lipidated Building Blocks

#### General Information

Fatty acids are key components and abundant constituents of all biological systems and are subject of many clinical, nutritional, and metabolic studies as they play a crucial role for normal functioning at all levels of an organism.

Dysfunction in fatty acid metabolism is related to various pathological states, e.g., cancer and neuro-degenerative diseases. Thus, the study and tracing of fatty acids during metabolism has become an important focus of biomedical research.

Exemplary fields of application for fatty acid building blocks:

- Azide-/alkyne-functionalized fatty acid building blocks for Click chemistry
- Fatty acid-derivatized peptides for improved plasma half-life
- Lipidated poly(amino acid)s for drug delivery

#### Clickable Fatty Acids

In the past, the major technology for the analysis of fatty acid metabolism was radioisotope tracing being regulated by special laboratory requirements as well as high costs for purchase of substances as well as disposal of radioactive waste. As radioactivity-free alternative Click chemistry-based labeling methods are gaining ground. Clickable fatty acid building blocks containing azido or alkyne groups can be integrated into fatty acids without major disturbance of the structure of the hydrophobic hydrocarbon chains.

#### Increased Half-Life

Furthermore, this topic gained interest as the modification of peptides with fatty acids may lead to increased serum half-life and improved pharmacokinetic and pharmacologic *in vivo* performance via binding to albumin. The most prominent examples in this context are the marketed glucagon-like peptide-1 analog blockbuster drugs Liraglutide and Semaglutide.

#### GLP – 1 (7-37) amide

H–His–Ala–Glu–Gly–Thr–Phe–Thr–Ser–Asp–Val–Ser–Ser–Tyr–Leu–Glu–Gly–Gln–Ala–Ala–Lys–Glu–Phe–Ile–Ala–Trp–Leu–Val–Lys–Gly–Arg–Gly–NH<sub>2</sub>

**Liraglutide (Victoza®) . . . . . \$4.4 billion (2018)**

[ $\gamma$ -L-Glutamoyl(N- $\alpha$ -hexadecanoyl)-Lys26, Arg34-GLP-1(7-37)]  
H-His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys( $\gamma$ -Glu-palmitoyl)-Glu-Phe-Ile-Ala-Trp-Leu-Val-Arg-Gly-Arg-Gly-OH

**Semaglutide (Rybelsus®, Ozempic) . . . . . \$267 million (2018)**

N<sup>6,26</sup>-{18-[N-(17-carboxyheptadecanoyl)-L- $\gamma$ -glutamyl]-10-oxo-3,6,12,15-tetraoxa-9,18-diazaoctadecanoyl}-[8-(2-amino-2-propanoic acid),34-L-arginine]-GLP-1(7-37)]  
H-His-Aib-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys(C<sub>18</sub>-diacid- $\gamma$ -Glu-OEG-OEG)-Glu-Phe-Ile-Ala-Trp-Leu-Val-Arg-Gly-Arg-Gly-OH

## Further Properties

Besides the above-mentioned applications, fatty amino acids have various other interesting properties. They may increase cell permeability of compounds and even allow substances to cross the blood-brain barrier. Another hot topic in the light of COVID-19 is the delivery of synthetic mRNA-packed in lipid-based vesicles.

## Derivatives available at Iris Biotech

- Boc- and Fmoc-protected fatty acids
- Functionalized fatty acid derivatives (e.g., NHS active esters, azides, alkynes)
- Fatty amino acids
- Building blocks for the peptide blockbusters Liraglutide, Semaglutide, and Tirzepatide



**The commercial availability of related products facilitates research, allows to gain better understanding and accelerates the development of new medicines.**

**Please inquire with our Custom Synthesis Service, if you cannot find the product you are looking for!**

# Peptide Modifiers

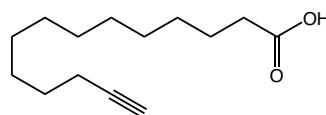
## Clickable Fatty Acid Building Blocks

Product details

### RL-2055 Alkyne-myristic acid

13-Tetradecynoic acid

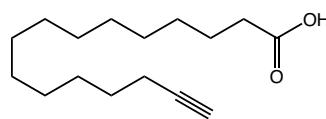
CAS-No. 82909-47-5  
Formula C<sub>14</sub>H<sub>26</sub>O<sub>2</sub>  
Mol. weight 224,34 g/mol



### RL-2060 Alkyne-palmitic acid

15-Hexadecynoic acid

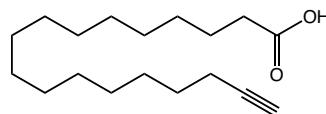
CAS-No. 99208-90-9  
Formula C<sub>16</sub>H<sub>28</sub>O<sub>2</sub>  
Mol. weight 252,39 g/mol



### RL-2065 Alkyne-stearic acid

17-Octadecynoic acid

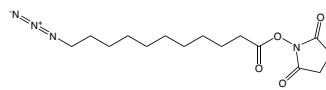
CAS-No. 34450-18-5  
Formula C<sub>18</sub>H<sub>32</sub>O<sub>2</sub>  
Mol. weight 280,45 g/mol



### RL-3170 11-Azido-undecanoyl-OSu

11-Azidoundecanoic acid N-hydroxysuccinimide ester

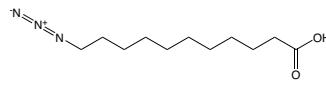
CAS-No. 850080-13-6  
Formula C<sub>15</sub>H<sub>24</sub>N<sub>4</sub>O<sub>4</sub>  
Mol. weight 324,38 g/mol



### RL-3200 11-Azidoundecanoic acid

11-Azido-undecanoic acid

CAS-No. 118162-45-1  
Formula C<sub>11</sub>H<sub>21</sub>N<sub>3</sub>O<sub>2</sub>  
Mol. weight 227,30 g/mol



Product details

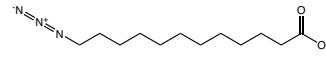
**RL-3210      12-Azidododecanoic acid**

12-Azido-dodecanoic acid

CAS-No.      80667-36-3

 Formula       $C_{12}H_{23}N_3O_2$ 

Mol. weight      241,33 g/mol

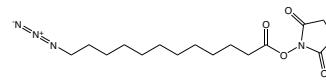

**RL-3220      12-Azido-dodecanoyl-OSu**

12-Azidododecanoic acid N-hydroxysuccinimide ester

CAS-No.      2489524-00-5

 Formula       $C_{16}H_{26}N_4O_4$ 

Mol. weight      338,40 g/mol

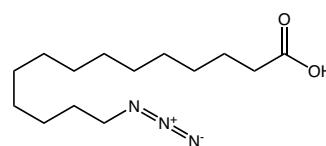

**RL-3230      14-Azido-myristic acid**

14-azidotetradecanoic acid

CAS-No.      176108-61-5

 Formula       $C_{14}H_{27}N_3O_2$ 

Mol. weight      269,38 g/mol

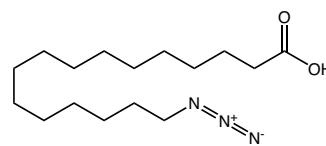

**RL-3240      16-Azido-palmitic acid**

16-azidohexadecanoic acid

CAS-No.      112668-54-9

 Formula       $C_{16}H_{31}N_3O_2$ 

Mol. weight      297,44 g/mol

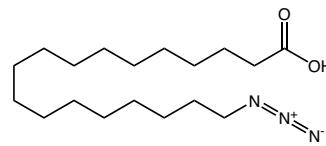

**RL-3250      18-Azido-stearic acid**

18-azidoctadecanoic acid

CAS-No.      1529763-58-3

 Formula       $C_{18}H_{35}N_3O_2$ 

Mol. weight      325,49 g/mol

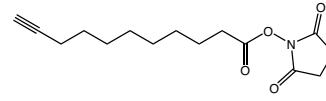

**RL-3460      10-Undecynoyl-OSu**

10-Undecynoic acid N-hydroxysuccinimide ester

CAS-No.      1006592-57-9

 Formula       $C_{15}H_{21}NO_4$ 

Mol. weight      279,34 g/mol



# Peptide Modifiers

Product details

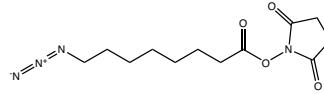
## RL-3480 8-Azido-octanoyl-OSu

8-Azidodoctanoic acid N-hydroxysuccinimide ester

CAS-No. 2576471-56-0

Formula C<sub>12</sub>H<sub>18</sub>N<sub>4</sub>O<sub>4</sub>

Mol. weight 282,30 g/mol



## Available Fatty Acid containing Building Blocks related to Liraglutide

Product details

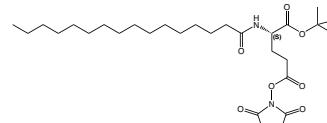
### PAA1000 Palm-L-Glu(OSu)-OtBu

N-alpha-Palmitoyl-L-glutamic-acid alpha-t-butyl-gamma-succinimidyl ester

CAS-No. 204521-63-1

Formula C<sub>29</sub>H<sub>50</sub>N<sub>2</sub>O<sub>7</sub>

Mol. weight 538,72 g/mol



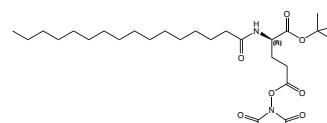
### PAA1005 Palm-D-Glu(OSu)-OtBu

N-alpha-Palmitoyl-D-glutamic-acid alpha-t-butyl-gamma-succinimidyl ester

CAS-No. 240133-35-1

Formula C<sub>29</sub>H<sub>50</sub>N<sub>2</sub>O<sub>7</sub>

Mol. weight 538,72 g/mol



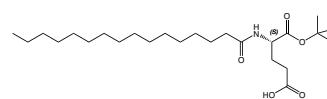
### PAA1160 Palm-L-Glu-OtBu

N-alpha-Palmitoyl-L-glutamic-acid alpha-t-butyl ester

CAS-No. 536721-25-2

Formula C<sub>25</sub>H<sub>47</sub>NO<sub>5</sub>

Mol. weight 441,64 g/mol



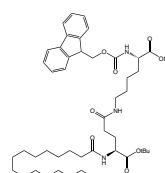
### FAA3790 Fmoc-L-Lys(Palm-L-Glu-OtBu)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-  
ion-(N-alpha'-palmitoyl-L-glutamic-acid alpha'-t-butyl  
ester)-L-lysine

CAS-No. 1491158-62-3

Formula C<sub>46</sub>H<sub>69</sub>N<sub>3</sub>O<sub>8</sub>

Mol. weight 792,06 g/mol

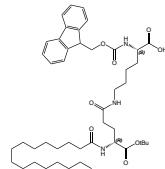


Product details

**FAA7760 Fmoc-L-Lys(Palm-D-Glu-OtBu)-OH**

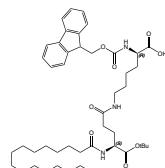
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-  
ion-(N-alpha'-palmitoyl-D-glutamic-acid alpha'-t-butyl  
ester)-L-lysine

Formula      C<sub>46</sub>H<sub>69</sub>N<sub>3</sub>O<sub>8</sub>  
Mol. weight    792,06 g/mol

**FAA7480 Fmoc-D-Lys(Palm-L-Glu-OtBu)-OH**

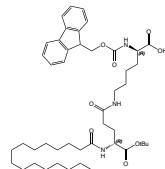
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-  
ion-(N-alpha'-palmitoyl-L-glutamic-acid alpha'-t-butyl  
ester)-D-lysine

CAS-No.      1491158-71-4  
Formula      C<sub>46</sub>H<sub>69</sub>N<sub>3</sub>O<sub>8</sub>  
Mol. weight    792,06 g/mol

**FAA7750 Fmoc-D-Lys(Palm-D-Glu-OtBu)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-  
ion-(N-alpha'-palmitoyl-D-glutamic-acid alpha'-t-butyl  
ester)-D-lysine

Formula      C<sub>46</sub>H<sub>69</sub>N<sub>3</sub>O<sub>8</sub>  
Mol. weight    792,06 g/mol

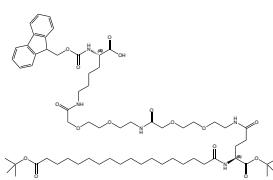
**Available Building Blocks related to Semaglutide**

Product details

**FAA7640 Fmoc-L-Lys(Ggu-L-Glu(AA-AA))-OH**

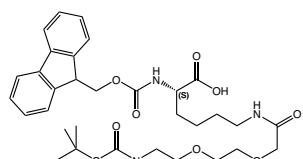
Fmoc-Lys(tBu-OOC-C16-CO-Glu(AEEA-AEEA)-OtBu)-OH

CAS-No.      1662688-20-1  
Formula      C<sub>64</sub>H<sub>101</sub>N<sub>5</sub>O<sub>16</sub>  
Mol. weight    1196,51 g/mol

**FAA3730 Fmoc-L-Lys(Boc-AEEA)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-  
ion-(2-(2-(2-(t-butyloxycarbonyl)aminoethoxy)ethoxy)  
acetyl)-L-lysine

CAS-No.      1662688-16-5  
Formula      C<sub>32</sub>H<sub>43</sub>N<sub>3</sub>O<sub>9</sub>  
Mol. weight    613,17 g/mol



# Peptide Modifiers

Product details

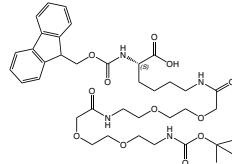
## FAA9500 Fmoc-L-Lys(Boc-AEEA-AEEA)-OH

(S)-28-(((9H-fluoren-9-yl)methoxy)carbonyl)amino)-2,2-dimethyl-4,13,22-trioxo-3,8,11,17,20-pentaoxa-5,14,23-triazanonacosan-29-oic acid

CAS-No. 1662688-18-7

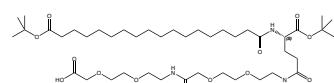
Formula C<sub>38</sub>H<sub>54</sub>N<sub>4</sub>O<sub>12</sub>

Mol. weight 758,87 g/mol



## OAA1000 C18-OtBu-L-Glu(AEEA-AEEA)-OtBu

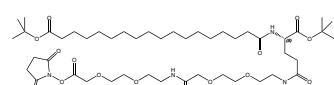
(S)-22-(t-butoxycarbonyl)-45,45-dimethyl-10,19,24,43-tetraoxo-3,6,12,15,44-pentaoxa-9,18,23-triazahexatetracontanoic acid



## OAA1010 C18-OtBu-L-Glu(AEEA-AEEA-NHS)-OtBu

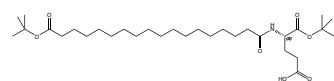
21,39-di-t-butyl 1-(2,5-dioxopyrrolidin-1-yl)

(S)-9,18,23-trioxo-2,5,11,14-tetraoxa-8,17,22-triazanonatriacontane-1,21,39-tricarboxylate



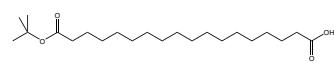
## OAA1020 C18-OtBu-L-Glu-OtBu

(S)-5-(t-butoxy)-4-(18-(t-butoxy)-18-oxooctadecanamido)-5-oxopentanoic acid



## OAA1030 Octadecanedioic acid, mono tBu ester

18-(t-butoxy)-18-oxooctadecanoic acid



## Product details

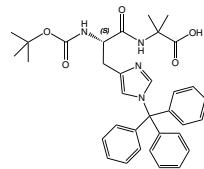
**BDP1000 Boc-L-His(Trt)-Aib-OH**

N-alpha-t-Butyloxycarbonyl-L-histidyl-Nim-trityl-aminoisobutyric acid

CAS-No. 2061897-68-3

Formula C<sub>34</sub>H<sub>38</sub>N<sub>4</sub>O<sub>5</sub>

Mol. weight 582,70 g/mol

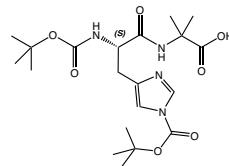
**BDP1010 Boc-L-His(Boc)-Aib-OH**

N-alpha-t-Butyloxycarbonyl-L-histidyl-Nim-t-butyloxy-carbonyl-aminoisobutyric acid

CAS-No. 1169630-98-1

Formula C<sub>20</sub>H<sub>32</sub>N<sub>4</sub>O<sub>7</sub>

Mol. weight 440,50 g/mol

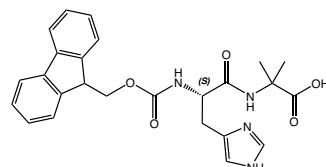
**FDP1440 Fmoc-L-His-Aib-OH\*TFA**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-L-histidyl-aminoisobutyric acid trifluoroacetate

CAS-No. 1446013-08-6

Formula C<sub>25</sub>H<sub>26</sub>N<sub>4</sub>O<sub>5</sub>\*CF<sub>3</sub>CO<sub>2</sub>H

Mol. weight 462,51\*114,02 g/mol

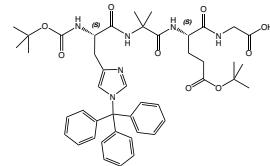
**BDP1020 Boc-L-His(Trt)-Aib-L-Glu(OtBu)-Gly-OH**

N-alpha-t-Butyloxycarbonyl-L-histidyl-Nim-trityl-aminoisobutyroyl-gamma-t-butyl ester-L-glutamyl-glycine

CAS-No. 1890228-73-5

Formula C<sub>45</sub>H<sub>56</sub>N<sub>6</sub>O<sub>9</sub>

Mol. weight 824,98 g/mol

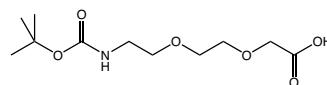
**PEG8080 Boc-O<sub>2</sub>Oc-OH**

(2-(t-Butyloxycarbonylamino)ethoxy)ethoxy)acetic acid

CAS-No. 108466-89-3

Formula C<sub>11</sub>H<sub>21</sub>NO<sub>6</sub>

Mol. weight 263,29 g/mol

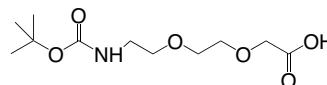
**BAA1466 Boc-O<sub>2</sub>Oc-OH\*DCHA**

8-(t-Butyloxycarbonyl-amino)-3,6-dioxaoctanoic acid dicyclohexylammonium salt

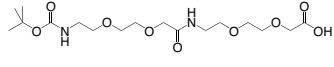
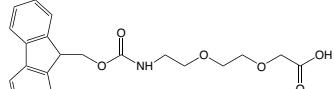
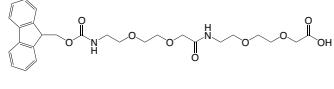
CAS-No. 560088-79-1

Formula C<sub>11</sub>H<sub>21</sub>NO<sub>6</sub>\*C<sub>12</sub>H<sub>23</sub>N

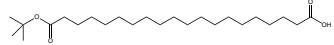
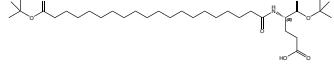
Mol. weight 263,29\*181,32 g/mol



## Peptide Modifiers

		Product details
BAA1485	<b>Boc-O<sub>2</sub>Oc-O<sub>2</sub>Oc-OH</b> 17-(t-Butyloxycarbonyl-amino)-9-aza-3,6,12,15-tetraoxa-10-on-heptadecanoic acid CAS-No. 1069067-08-8 Formula C <sub>17</sub> H <sub>32</sub> N <sub>2</sub> O <sub>9</sub> Mol. weight 408,45 g/mol	 
FAA1435	<b>Fmoc-O<sub>2</sub>Oc-OH</b> 8-(9-Fluorenylmethyloxycarbonyl-amino)-3,6-dioxaoc-tanoic acid CAS-No. 166108-71-0 Formula C <sub>21</sub> H <sub>23</sub> NO <sub>6</sub> Mol. weight 385,42 g/mol	 
FAA1787	<b>Fmoc-O<sub>2</sub>Oc-O<sub>2</sub>Oc-OH</b> 17-(9-Fluorenylmethyloxycarbo-nyl-amino)-9-aza-3,6,12,15-tetraoxa-10-on-heptadeca-noic acid CAS-No. 560088-89-3 Formula C <sub>27</sub> H <sub>34</sub> N <sub>2</sub> O <sub>9</sub> Mol. weight 530,58 g/mol	 

## Available Building Blocks related to Tirzepatide

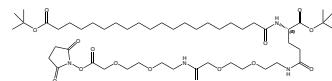
		Product details
EAA1010	<b>20-(OtBu)-20-oxoicosanoic acid</b> 20-(tert-Butoxy)-20-oxoicosanoic acid CAS-No. 683239-16-9 Formula C <sub>24</sub> H <sub>46</sub> O <sub>4</sub> Mol. weight 398,63 g/mol	 
EAA1020	<b>C20-OtBu-L-Glu-OtBu</b> (S)-5-(t-butoxy)-4-(20-(t-butoxy)-20-oxoicosanamido)-5-oxopentanoic acid CAS-No. 1119061-70-9 Formula C <sub>33</sub> H <sub>61</sub> NO <sub>7</sub> Mol. weight 583,85 g/mol	 

## Product details

**EAA1030 C20-OtBu-L-Glu(AEEA-AEEA-NHS)-OtBu**

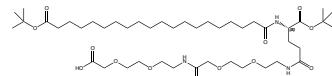
21,41-di-*t*-butyl 1-(2,5-dioxopyrrolidin-1-yl)  
(S)-9,18,23-trioxo-2,5,11,14-tetraoxa-8,17,22-triazahentetracontane-1,21,41-tricarboxylate

CAS-No. 1118767-17-1  
Formula C<sub>49</sub>H<sub>86</sub>N<sub>4</sub>O<sub>15</sub>  
Mol. weight 971,24 g/mol


**EAA1040 C20-OtBu-L-Glu(AEEA-AEEA)-OtBu**

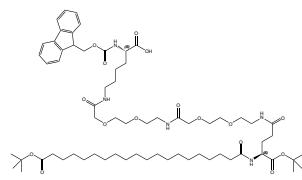
21,41-di-*t*-butyl (S)-9,18,23-trioxo-2,5,11,14-te-  
traoxa-8,17,22-triazahentetracontane-1,21,41-tricar-  
boxylate

CAS-No. 1188328-37-1  
Formula C<sub>45</sub>H<sub>83</sub>N<sub>3</sub>O<sub>13</sub>  
Mol. weight 874,17 g/mol


**FAA9210 Fmoc-L-Lys[C20-OtBu-L-Glu(OtBu)-AA-AA]-OH**

(2S,5S)-52-(((9H-fluoren-9-yl)methoxy)carbonyl)  
amino-25-(tert-butoxycarbonyl)-2,2-dimethyl-  
4,23,28,37,46-pentaoxo-3,32,35,41,44-pentaoxa-  
24,29,38,47-tetraazatrispiro[5.5.5.5]pentadecan-53-oic acid

CAS-No. 2915356-76-0  
Formula C<sub>66</sub>H<sub>105</sub>N<sub>5</sub>O<sub>16</sub>  
Mol. weight 1224,59 g/mol



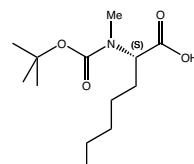
## Fatty Amino Acids

## Product details

**BAA3700 Boc-L-Me2Ahp-OH**

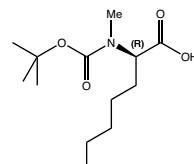
(S)-2-((*t*-Butyloxycarbonyl)(methyl)amino)heptanoic  
acid

CAS-No. 2389078-55-9  
Formula C<sub>13</sub>H<sub>25</sub>NO<sub>4</sub>  
Mol. weight 259,34 g/mol


**BAA3790 Boc-D-Me2Ahp-OH**

(R)-2-((*t*-Butyloxycarbonyl)(methyl)amino)heptanoic  
acid

CAS-No. 2389078-41-3  
Formula C<sub>13</sub>H<sub>25</sub>NO<sub>4</sub>  
Mol. weight 259,34 g/mol



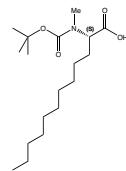
# Peptide Modifiers

Product details

## BAA3880 Boc-L-Me2Ado-OH

(S)-2-((t-Butyloxycarbonyl)(methyl)amino)dodecanoic acid

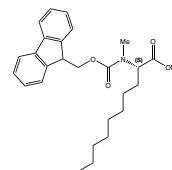
CAS-No. 2389078-48-0  
Formula C<sub>18</sub>H<sub>35</sub>NO<sub>4</sub>  
Mol. weight 329,47 g/mol



## FAA7280 Fmoc-L-Me2Adec-OH

(S)-2-((9-Fluorenylmethyloxycarbonyl)(methyl)amino)decanoic acid

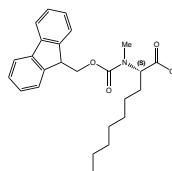
CAS-No. 2389078-80-0  
Formula C<sub>26</sub>H<sub>33</sub>NO<sub>4</sub>  
Mol. weight 423,54 g/mol



## FAA7300 Fmoc-L-Me2Anon-OH

(S)-2-((9-Fluorenylmethyloxycarbonyl)(methyl)amino)nonanoic acid

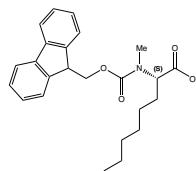
CAS-No. 2389078-35-5  
Formula C<sub>25</sub>H<sub>31</sub>NO<sub>4</sub>  
Mol. weight 409,52 g/mol



## FAA7330 Fmoc-L-Me2Aoc-OH

(S)-2-((9-Fluorenylmethyloxycarbonyl)(methyl)amino)octanoic acid

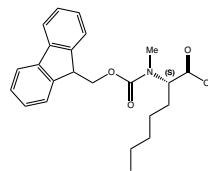
CAS-No. 2389078-28-6  
Formula C<sub>24</sub>H<sub>29</sub>NO<sub>4</sub>  
Mol. weight 395,49 g/mol



## FAA7390 Fmoc-L-Me2Ahp-OH

(S)-2-((9-Fluorenylmethyloxycarbonyl)(methyl)amino)heptanoic acid

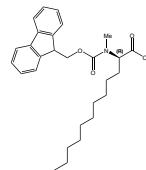
CAS-No. 2642726-02-9  
Formula C<sub>23</sub>H<sub>27</sub>NO<sub>4</sub>  
Mol. weight 381,46 g/mol



## FAA7420 Fmoc-D-Me2Ado-OH

(R)-2-((9-Fluorenylmethyloxycarbonyl)(methyl)amino)dodecanoic acid

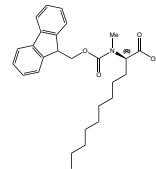
CAS-No. 2389078-21-9  
Formula C<sub>28</sub>H<sub>37</sub>NO<sub>4</sub>  
Mol. weight 451,6 g/mol



**FAA7430 Fmoc-D-Me2Aund-OH**

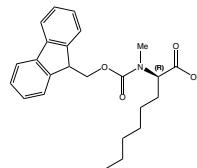
(R)-2-((9-Fluorenylmethyloxycarbonyl)(methyl)amino) undecanoic acid

CAS-No. 2389078-36-6  
 Formula C<sub>27</sub>H<sub>35</sub>NO<sub>4</sub>  
 Mol. weight 437,57 g/mol


**FAA7440 Fmoc-D-Me2Aoc-OH**

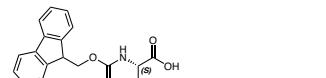
(R)-2-((9-Fluorenylmethyloxycarbonyl)(methyl)amino) octanoic acid

CAS-No. 2389078-83-3  
 Formula C<sub>24</sub>H<sub>29</sub>NO<sub>4</sub>  
 Mol. weight 395,49 g/mol


**FAA8540 Fmoc-L-2AHe-OH**

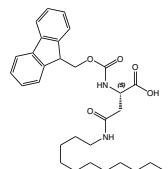
(S)-N-(9-Fluorenylmethyloxycarbonyl)-2-amino-hexadecanoic acid

CAS-No. 193885-60-8  
 Formula C<sub>31</sub>H<sub>43</sub>NO<sub>4</sub>  
 Mol. weight 493,68 g/mol


**FAA7870 Fmoc-L-Asn(lauryl)-OH**

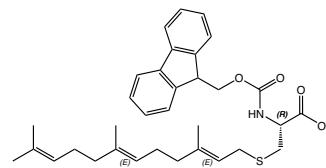
N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-beta-lauryl-L-asparagine

CAS-No. 843663-82-1  
 Formula C<sub>31</sub>H<sub>42</sub>N<sub>2</sub>O<sub>5</sub>  
 Mol. weight 522,68 g/mol


**FAA7890 Fmoc-L-Cys(farnesyl)-OH**

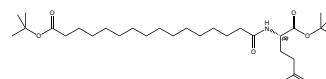
N-alpha-(9-Fluorenylmethyloxycarbonyl)-S-farnesyl-L-cysteine

CAS-No. 876312-47-9  
 Formula C<sub>33</sub>H<sub>44</sub>NO<sub>4</sub>S  
 Mol. weight 547,75 g/mol

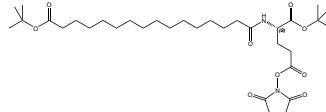
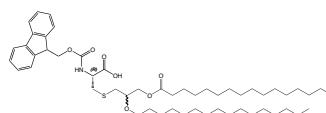
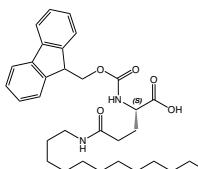
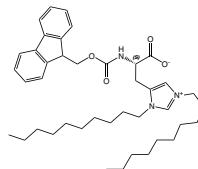
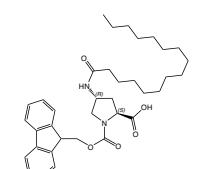
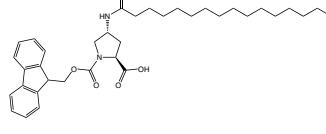

**PAA2010 C16-OtBu-L-Glu-OtBu**

(S)-5-(t-butoxy)-4-(16-(t-butoxy)-16-oxohexadecanamido)-5-oxopentanoic acid

CAS-No. 843666-29-5  
 Formula C<sub>29</sub>H<sub>53</sub>NO<sub>7</sub>  
 Mol. weight 527,74 g/mol



## Peptide Modifiers

		Product details
PAA2020	C16-OtBu-L-Glu(NHS)-OtBu	<p>1-(<i>t</i>-butyl) 5-(2,5-dioxopyrrolidin-1-yl) (16-(<i>t</i>-butyloxy)-16-oxohexadecanoyl)-L-glutamate</p> <p>CAS-No. 843666-26-2 Formula C<sub>33</sub>H<sub>56</sub>N<sub>2</sub>O<sub>9</sub> Mol. weight 624,82 g/mol</p>  
FAA7900	Fmoc-L-Cys(glycyl-bis-palmityl)-OH	<p>N-((9H-fluoren-9-yl)methoxy)carbonyl-S-(2,3-bis(palmitoyloxy)propyl)-L-cysteine</p> <p>CAS-No. 210532-98-2 Formula C<sub>55</sub>H<sub>83</sub>NO<sub>8</sub>S Mol. weight 894,31 g/mol</p>  
FAA7880	Fmoc-L-Gln(lauryl)-OH	<p>N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-gamma-lauryl-L-glutamine</p> <p>CAS-No. 2576508-11-5 Formula C<sub>32</sub>H<sub>44</sub>N<sub>2</sub>O<sub>5</sub> Mol. weight 536,7 g/mol</p>  
FAA7910	Fmoc-L-His(bis-decyl)-O*2HCl	<p>N-alpha-(9-Fluorenylmethyloxycarbonyl)-N'&gt;im,N''im-bisdecyl-L-histidinium dihydrochloride</p> <p>CAS-No. 1469805-17-1 Formula C<sub>41</sub>H<sub>59</sub>N<sub>3</sub>O<sub>4</sub>*2HCl Mol. weight 657,92*72,91 g/mol</p>  
FAA9570	Fmoc-L-Pro(4-NH-Palm)-OH (2S,4S)	<p>(2S,4R)-1-(((9H-fluoren-9-yl)methoxy)carbonyl)-4-palmitamidopyrrolidine-2-carboxylic acid</p> <p>Formula C<sub>36</sub>H<sub>50</sub>N<sub>2</sub>O<sub>5</sub> Mol. weight 590,81 g/mol</p>  
FAA8900	Fmoc-L-Pro(4-NH-Pal)-OH (2S,4R)	<p>(2S,4R)-1-(((9H-fluoren-9-yl)methoxy)carbonyl)-4-palmitamidopyrrolidine-2-carboxylic acid</p> <p>Formula C<sub>36</sub>H<sub>50</sub>N<sub>2</sub>O<sub>5</sub> Mol. weight 590,81 g/mol</p>  

## Product details

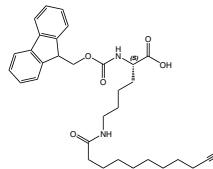
**FAA8190 Fmoc-L-Lys(Undecynoyl)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-  
lon-(10-undecynoyl)-L-lysine

CAS-No. 2576507-95-2

Formula C<sub>32</sub>H<sub>40</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 532,68 g/mol

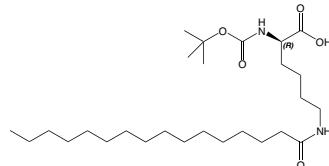

**BAA1479 Boc-D-Lys(Palm)-OH**

N-alpha-t-Butyloxycarbonyl-N-epsilon-palmitoyl-D-ly-  
sine

CAS-No. 1301706-37-5

Formula C<sub>27</sub>H<sub>52</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 484,73 g/mol

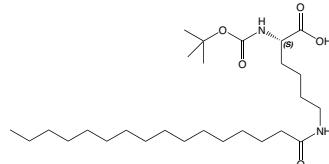

**BAA1480 Boc-L-Lys(Palm)-OH**

N-alpha-t-Butyloxycarbonyl-N-epsilon-palmitoyl-L-ly-  
sine

CAS-No. 59515-45-6

Formula C<sub>27</sub>H<sub>52</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 484,73 g/mol

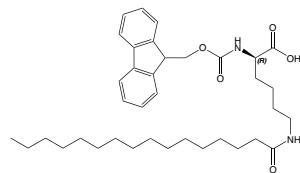

**FAA1776 Fmoc-D-Lys(Palm)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-  
lon-palmitoyl-D-lysine

CAS-No. 1301706-55-7

Formula C<sub>37</sub>H<sub>54</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 606,85 g/mol

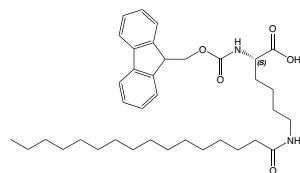

**FAA1778 Fmoc-L-Lys(Palm)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-  
lon-palmitoyl-L-lysine

CAS-No. 201004-46-8

Formula C<sub>37</sub>H<sub>54</sub>N<sub>2</sub>O<sub>5</sub>

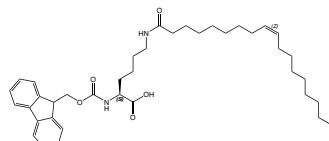
Mol. weight 606,85 g/mol


**FAA8925 Fmoc-L-Lys(Oleoyl)-OH**

N2-((9H-fluoren-9-yl)methoxy)carbonyl)-N6-ole-  
oyl-L-lysine

Formula C<sub>39</sub>H<sub>56</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 632,89 g/mol

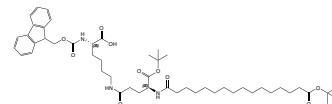


# Peptide Modifiers

Product details

## FAA8980 Fmoc-L-Lys(tBuO-Thap-L-Glu-OtBu)-OH

N2-(((9H-fluoren-9-yl)methoxy)carbonyl)-N6-((S)-5-(*tert*-butoxy)-4-(16-(*tert*-butoxy)-16-oxohexadecanamido)-5-oxopentanoyl)-L-lysine



CAS-No. 1671100-52-9

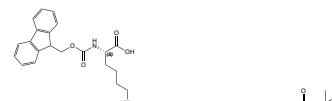
Formula C<sub>50</sub>H<sub>75</sub>N<sub>3</sub>O<sub>10</sub>

Mol. weight 878,16 g/mol



## FAA8990 Fmoc-L-Lys(tBuO-Thap)-OH

N2-(((9H-fluoren-9-yl)methoxy)carbonyl)-N6-(16-(*tert*-butoxy)-16-oxohexadecanoyl)-L-lysine



CAS-No. 2952671-06-4

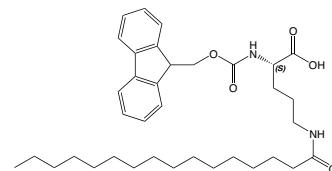
Formula C<sub>41</sub>H<sub>60</sub>N<sub>2</sub>O<sub>7</sub>

Mol. weight 692,94 g/mol



## FAA1779 Fmoc-L-Orn(Palm)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-delta-palmitoyl-L-ornithine



CAS-No. 1301706-41-1

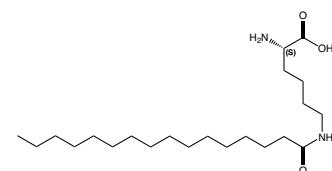
Formula C<sub>36</sub>H<sub>52</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 592,83 g/mol



## HAA3090 H-L-Lys(Palm)-OH

N-epsilon-Palmitoyl-L-lysine



CAS-No. 59012-43-0

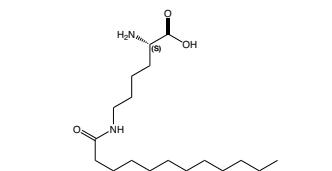
Formula C<sub>22</sub>H<sub>44</sub>N<sub>2</sub>O<sub>3</sub>

Mol. weight 384,61 g/mol



## HAA4020 H-L-Lys(lauroyl)-OH

N-epsilon-Lauroyl-L-lysine



CAS-No. 52315-75-0

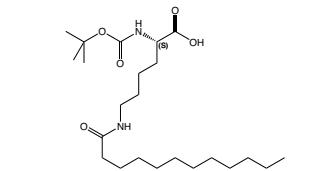
Formula C<sub>18</sub>H<sub>36</sub>N<sub>2</sub>O<sub>3</sub>

Mol. weight 328,49 g/mol



## BAA3660 Boc-L-Lys(lauroyl)-OH

N-alpha-t-butyloxycarbonyl-N-epsilon-lauroyl-L-lysine



CAS-No. 702706-14-7

Formula C<sub>23</sub>H<sub>44</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 428,61 g/mol



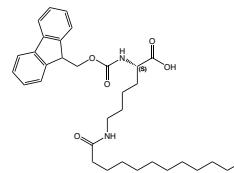
**FAA7500 Fmoc-L-Lys(lauroyl)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-lon-lauroyl-L-lysine

CAS-No. 1128181-21-4

Formula C<sub>33</sub>H<sub>46</sub>N<sub>2</sub>O<sub>5</sub>

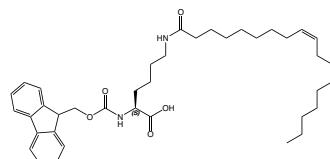
Mol. weight 550,73 g/mol


**FAA9195 Fmoc-L-Lys(Linoleoyl)-OH**

N2-((9H-fluoren-9-yl)methoxy)carbo-nyl)-N6-((9Z,12Z)-octadeca-9,12-dienoyl)-L-lysine

Formula C<sub>39</sub>H<sub>54</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 630,87 g/mol

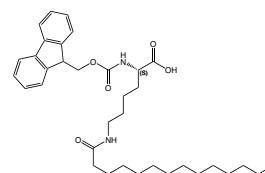

**FAA7490 Fmoc-L-Lys(Myr)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-lon-myristoyl-L-lysine

CAS-No. 1128181-23-6

Formula C<sub>35</sub>H<sub>50</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 578,78 g/mol

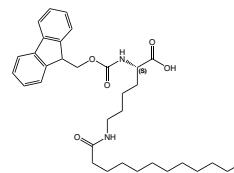

**FAA7500 Fmoc-L-Lys(lauroyl)-OH**

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-epsilon-lon-lauroyl-L-lysine

CAS-No. 1128181-21-4

Formula C<sub>33</sub>H<sub>46</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 550,73 g/mol

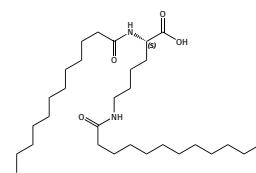

**HAA4030 Lauroyl-L-Lys(Lauroyl)-OH**

N-alpha,N-epsilon-Bis(dodecanoyl)-L-lysine

CAS-No. 14379-54-5

Formula C<sub>30</sub>H<sub>58</sub>N<sub>2</sub>O<sub>4</sub>

Mol. weight 510,79 g/mol

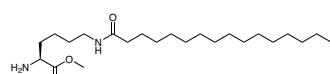

**HAA9225 H-L-Lys(Palm)-OMe\*HCl**

Methyl N-epsilon-palmitoyl-L-lysine hydrochloride

CAS-No. 890026-44-5

Formula C<sub>23</sub>H<sub>46</sub>N<sub>2</sub>O<sub>3</sub>\*HCl

Mol. weight 398,63\*36,46 g/mol



## Peptide Modifiers

Product details

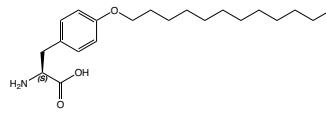
### HAA9325 H-L-Tyr(Lauryl)-OH\*HCl

O-dodecyl-L-Tyrosine hydrochloride

CAS-No. 199125-95-6 (net)

Formula C<sub>21</sub>H<sub>35</sub>NO<sub>3</sub>\*HCl

Mol. weight 349,51\*36,46 g/mol



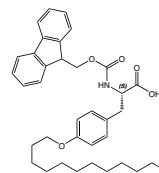
### FAA7860 Fmoc-L-Tyr(lauryl)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-O-lauryl-L-tyrosine

CAS-No. 2576508-15-9

Formula C<sub>36</sub>H<sub>45</sub>NO<sub>5</sub>

Mol. weight 571,75 g/mol



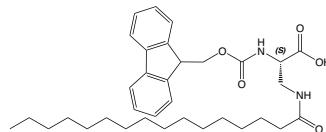
### FAA1935 Fmoc-L-Dap(Palm)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-beta-palmitoyl-L-2,3-diaminopropionic acid

CAS-No. 724785-41-5

Formula C<sub>34</sub>H<sub>48</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 564,76 g/mol



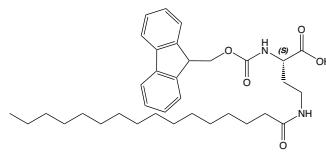
### FAA1940 Fmoc-L-Dab(Palm)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-gamma-palmitoyl-L-2,4-diaminobutyric acid

CAS-No. 1858224-29-9

Formula C<sub>35</sub>H<sub>50</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 578,78 g/mol



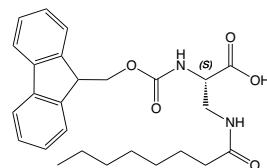
### FAA1945 Fmoc-L-Dap(Octanoyl)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-beta-octanoyl-L-2,3-diaminopropionic acid

CAS-No. 1423018-04-5

Formula C<sub>26</sub>H<sub>32</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 452,54 g/mol



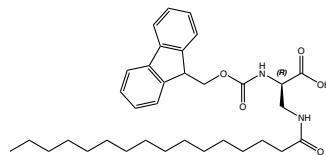
### FAA6960 Fmoc-D-Dap(Palm)-OH

N-alpha-(9-Fluorenylmethyloxycarbonyl)-N-beta-palmitoyl-D-2,3-diaminopropionic acid

CAS-No. 2389078-17-3

Formula C<sub>34</sub>H<sub>48</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight 564,76 g/mol



## Fatty Acid Derivatives

[Product details](#)

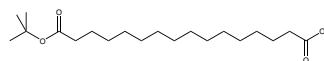
### PAA2025 Hexadecanedioic acid, mono tBu ester

16-(t-butoxy)-16-oxohexadecanoic acid

CAS-No. 843666-27-3

 Formula C<sub>20</sub>H<sub>38</sub>O<sub>4</sub>

Mol. weight 342,52 g/mol



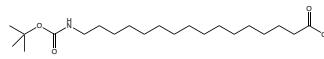
### BAA3900 16-(Boc-amino)-palmitic acid

16-((t-Butyloxycarbonyl)amino)hexadecanoic acid

CAS-No. 135747-73-8

 Formula C<sub>21</sub>H<sub>41</sub>NO<sub>4</sub>

Mol. weight 371,55 g/mol



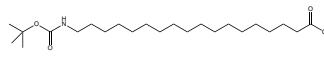
### BAA3910 18-(Boc-amino)-stearic acid

18-((t-Butyloxycarbonyl)amino)octadecanoic acid

CAS-No. 2389064-45-1

 Formula C<sub>23</sub>H<sub>45</sub>NO<sub>4</sub>

Mol. weight 399,61 g/mol



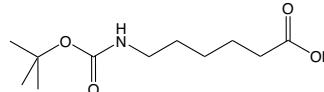
### BAA1336 Boc-6-Ahx-OH

N-t-Butyloxycarbonyl-6-amino-hexanoic acid

CAS-No. 6404-29-1

 Formula C<sub>11</sub>H<sub>21</sub>NO<sub>4</sub>

Mol. weight 231,28 g/mol



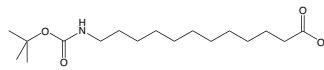
### BAA1323 Boc-12-Ado-OH

N-t-Butyloxycarbonyl-12-amino-dodecanoic acid

CAS-No. 18934-81-1

 Formula C<sub>17</sub>H<sub>33</sub>NO<sub>4</sub>

Mol. weight 315,44 g/mol



## Peptide Modifiers

Product details

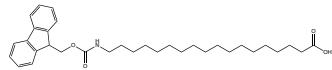
### FAA7450 18-(Fmoc-amino)-stearic acid

18-((9-Fluorenylmethyloxycarbonyl)amino)octadecanoic acid

CAS-No. 1199580-37-4

Formula C<sub>33</sub>H<sub>47</sub>NO<sub>4</sub>

Mol. weight 521,73 g/mol



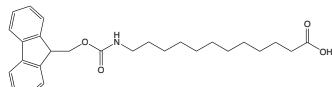
### FAA1635 Fmoc-12-Ado-OH

N-(9-Fluorenylmethyloxycarbonyl)-12-amino-dodecanoic acid

CAS-No. 128917-74-8

Formula C<sub>27</sub>H<sub>35</sub>NO<sub>4</sub>

Mol. weight 437,56 g/mol



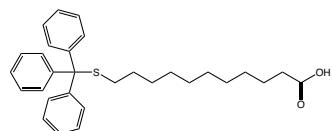
### RL-2750 Trt-S-C10H20-CO2H

11-Tritylsulfanyl-undecanoic acid

CAS-No. 202462-83-7

Formula C<sub>30</sub>H<sub>36</sub>O<sub>2</sub>S

Mol. weight 460,67 g/mol



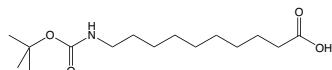
### BAA1321 Boc-10-Adc-OH

N-t-Butyloxycarbonyl-10-amino-decanoic acid

CAS-No. 173606-50-3

Formula C<sub>15</sub>H<sub>29</sub>NO<sub>4</sub>

Mol. weight 287,4 g/mol



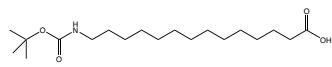
### BAA4240 14-(Boc-amino)-myristic acid

14-((t-Butyloxycarbonyl)amino)tetradecanoic acid

CAS-No. 2307778-46-5

Formula C<sub>19</sub>H<sub>37</sub>NO<sub>4</sub>

Mol. weight 343,51 g/mol



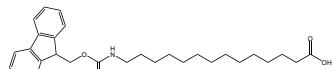
### FAA8160 14-(Fmoc-amino)-myristic acid

14-((9-Fluorenylmethyloxycarbonyl)amino)tetradecanoic acid

CAS-No. 1931109-55-5

Formula C<sub>29</sub>H<sub>39</sub>NO<sub>4</sub>

Mol. weight 465,63 g/mol



Product details

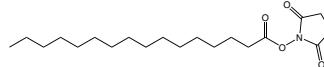
**RL-3810      NHS-palmitic acid**

N-(palmitoyloxy)-succinimide

CAS-No.      14464-31-4

Formula      C<sub>20</sub>H<sub>35</sub>NO<sub>4</sub>

Mol. weight    353,50 g/mol



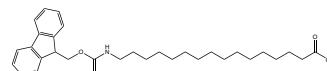
**FAA7460      16-(Fmoc-amino)-palmitic acid**

16-((9-Fluorenylmethyloxycarbonyl)amino)hexadecanoic acid

CAS-No.      1356220-22-8

Formula      C<sub>31</sub>H<sub>43</sub>NO<sub>4</sub>

Mol. weight    493,68 g/mol



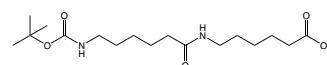
**BAA4870      Boc-Aca-Aca-OH**

N-Boc-6-(6-Aminohexanamido)hexanoic acid

CAS-No.      14254-45-6

Formula      C<sub>17</sub>H<sub>32</sub>N<sub>2</sub>O<sub>5</sub>

Mol. weight    344,45 g/mol



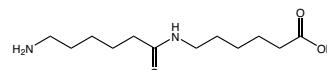
**HAA9300      H-Aca-Aca-OH**

6-(6-Aminohexanamido)hexanoic acid

CAS-No.      2014-58-6

Formula      C<sub>12</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>

Mol. weight    244,34 g/mol



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# Peptide Modifiers

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## Notes

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