

## Product List

## Part I – Conventional Protected Amino Acid

NO	Product	CAS No	Key quality indicator							
			purity	isomer	Specific impurity	Maximum unknown impurity	acetic acid	Ethyl acetate	Alcohol	Moisture
1	Fmoc-Ala-OH.H2O	35661-39-3	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤6.5%
2	Fmoc-Arg(pbf)-OH	154445-77-9	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
3	Fmoc-Asn(Trt)-OH	132388-59-1	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
4	Fmoc-Asp(OtBu)-OH	71989-14-5	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
5	Fmoc-Cys(Trt)-OH	103213-32-7	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
6	Fmoc-Gln(Trt)-OH	132327-80-1	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
7	Fmoc-Glu(OtBu)-OH.H2O	204251-24-1	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤5.0%
8	Fmoc-Gly-OH	29022-11-5	≥99.5%	/	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
9	Fmoc-His(Trt)-OH	109425-51-6	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
10	Fmoc-Ile-OH	71989-23-6	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
11	Fmoc-Leu-OH	35661-60-0	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
12	Fmoc-Lys(Boc)-OH	71989-26-9	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
13	Fmoc-Met-OH	71989-28-1	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
14	Fmoc-Phe-OH	35661-40-6	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
15	Fmoc-Pro-OH.H2O	71989-31-6	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤6.0%
16	Fmoc-Ser(tBu)-OH	71989-33-8	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
17	Fmoc-Thr(tBu)-OH	71989-35-0	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
18	Fmoc-Trp(Boc)-OH	143824-78-6	≥99.0%	≤0.1%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
19	Fmoc-Tyr(tBu)-OH	71989-38-3	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
20	Fmoc-Val-OH	68858-20-8	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%

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## Part II – GLP-1 Protected Amino Acid

NO	Product	CAS No	Key quality indicator							
			purity	isomer	Specific impurity	Maximum unknown impurity	acetic acid	Ethyl acetate	Alcohol	Moisture
1	Fmoc-Lys(Mtt)-OH	167393-62-6	≥99.0%	≤0.1%	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
2	Fmoc-Lys(Alloc)-OH	146982-27-6	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
3	Fmoc-Lys(ivDde)-OH	150629-67-7	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
4	Fmoc-Lys(Mmt)-OH	159857-60-0	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
5	Fmoc-Glu-OtBu	84793-07-7	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
6	Glu-OtBu	45120-30-7	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
7	Octadecanedioic acid	871-70-5	≥99.0%	/	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
8	Octadecanedioic acid mono-tert-butyl ester	843666-40-0	≥99.0%	/	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
9	Octa(OtBu)-Glu-OtBu	1188328-39-3	≥98.0%	≤0.2%	≤0.5%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
10	AEEA	134978-97-5	≥99.0%	/	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
11	AEEA-OH.HCl	134979-01-4	≥99.0%	/	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
12	Fmoc-AEEA-OH	166108-71-0	≥99.0%	/	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
13	Boc-AEEA-OH	108466-89-3	≥99.0%	/	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
14	AEEA-AEEA	1143516-05-5	≥98.0%	≤0.2%	≤0.5%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
15	Fmoc-AEEA-AEEA-OH	560088-89-3	≥98.0%	≤0.2%	≤0.5%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
16	Octa(OtBu)-Glu(α-OtBu)-AEEA-AEEA-OH	1118767-16-0	≥98.0%	≤0.2%	≤0.5%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
17	Octa(OtBu)-Glu(AEEA-AEEA-NHS)-OtBu	1118767-15-9	≥96.0%	≤0.5%	≤1.0%	≤1.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
18	Fmoc-Lys(Octa(OtBu)-Glu(AEEA-AEEA)-OtBu)-OH	1662688-20-1	≥96.0%	≤0.5%	≤1.0%	≤1.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
19	Boc-His(Trt)-OH	32926-43-5	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤4.0%
20	Fmoc-Aib-OH	94744-50-0	≥99.5%	/	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
21	Boc-His(Trt)-Aib-OH	2061897-68-3	≥99.0%	≤0.1%	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
22	Fmoc-Glu(OtBu)-Gly-OH	866044-63-5	≥99.5%	≤0.1%	≤0.2%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
23	Boc-His(Trt)-Aib-Glu(OtBu)-Gly-OH	1169630-31-2	≥98.0%	≤0.2%	≤0.5%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
24	Boc-His(Trt)-Aib-Glu(OtBu)-Gly-NHS	NA	≥96.0%	≤0.5%	≤1.0%	≤1.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
25	Fmoc-Arg(pbf)-Gly-OH	660846-80-0	≥99.5%	≤0.1%	≤0.2%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
26	Fmoc-Ala-Ala-OH	87512-31-0	≥99.5%	≤0.1%	≤0.2%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
27	Fmoc-Thr(tBu)-Phe-OH	1260609-75-3	≥99.5%	≤0.1%	≤0.2%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
28	Palmitic acid	57-10-3	≥99.0%	/	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
29	Palm-Glu-OtBu	NA	≥98.0%	≤0.2%	≤0.5%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
30	Palm-Glu(NHS)-OtBu	NA	≥96.0%	≤0.5%	≤1.0%	≤1.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
31	Fmoc-Lys(Palm-Glu-OtBu)-OH	1491158-62-3	≥98.0%	≤0.2%	≤0.5%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
32	Hexadecanedioic acid	505-54-4	≥99.0%	/	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
33	Hexadecanedioic acid mono-tert-butyl ester	843666-27-3	≥99.0%	/	≤0.2%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
34	tBu-OOC-C18-CO-Glu-OtBu	NA	≥98.0%	≤0.2%	≤0.5%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
35	tBu-OOC-C14-CO-Glu(NHS)-OtBu	NA	≥96.0%	≤0.5%	≤1.0%	≤1.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%

## Product List

## Part III – GnRH Antagonist/Agonist Protected Amino Acid

NO	Product	CAS No	Key quality indicator							
			purity	isomer	Specific impurity	Maximum unknown impurity	acetic acid	Ethyl acetate	Alcohol	Moisture
<b>一、GnRH antagonist</b>										
1	Fmoc-3-(2-naphthyl)-D-Ala-OH	138774-94-4	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
2	Ac-3-(2-naphthyl)-D-Ala-OH	37440-01-0	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
3	Fmoc-3-(3-pyridinyl)-D-Ala-OH	142994-45-4	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
4	Fmoc-4-chloro-D-Phe-OH	142994-19-2	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
5	Fmoc-D-Cit-OH	200344-33-8	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
6	Fmoc-D-Ala-OH.H <sub>2</sub> O	79990-15-1	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤6.5%
7	Fmoc-D-Aph(tBuCbm)-OH	1433975-21-3	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
8	Fmoc-D-Aph(Cbm)-OH	324017-22-3	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
9	Fmoc-L-Aph(L-Hor)-OH	1253282-31-3	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
10	Fmoc-L-Lys(iPr,Boc)-OH	201003-48-7	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
11	Fmoc-N-Me-Tyr(tBu)-OH	133373-24-7	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
12	Fmoc-D-Asn(Trt)-OH	180570-71-2	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
13	Fmoc-HomoArg(Et) <sub>2</sub> -OH.HCl	1864003-26-8	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
14	Fmoc-D-HomoArg(Et) <sub>2</sub> -OH.HCl	2098497-24-4	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
15	Fmoc-Lys(nicotinoyl)-OH	252049-11-9	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
16	Fmoc-D-Lys(nicotinoyl)-OH	252049-12-0	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
<b>二、GnRH agonist</b>										
17	Fmoc-D-Trp(Boc)-OH	163619-04-3	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
18	Pyr-OH	98-79-3	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
19	Fmoc-D-Ser(tBu)-OH	128107-47-1	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
20	Fmoc-Tyr(Bzl)-OH	71989-40-7	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
21	Fmoc-Arg(NO <sub>2</sub> )-OH	58111-94-7	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
22	Fmoc-Ser(Trt)-OH	111061-56-4	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
23	Fmoc-Trp-OH	35737-15-6	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
24	Fmoc-His-OH	116611-64-4	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
25	Fmoc-D-Leu-OH	114360-54-2	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
26	Fmoc-2-methyl-D-Trp-OH	196808-79-4	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
27	Fmoc-D-Phe-OH	86123-10-6	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
28	Fmoc-D-His(Bzl)-OH	1417638-37-9	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%

## Product List

## Part IV – Other Protected Amino Acid

NO	Product	CAS No	Key quality indicator							
			purity	isomer	Specific impurity	Maximum unknown impurity	acetic acid	Ethyl acetate	Alcohol	Moisture
1	Fmoc-Cys(Acm)-OH	86060-81-3	≥99.0%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
2	Fmoc-Cys(Mmt)-OH	177582-21-7	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
3	Fmoc-Cys(4-allylbutyrate)-OH	/	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
4	Mpa(Trt)-OH	27144-18-9	≥99.5%	/	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
5	Fmoc-Thr(tBu)-OL	189337-28-8	≥97.0%	≤0.3%	≤0.5%	≤1.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
6	Fmoc-D-Arg(pbf)-OH	187618-60-6	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
7	Fmoc-Gly-Gly-OH	35665-38-4	≥99.5%	/	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
8	Fmoc-Gly-Gly-Gly-OH	170941-79-4	≥99.5%	/	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
9	Fmoc-Gly-Gly-Gly-Gly-OH	/	≥99.5%	/	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
10	Fmoc-Gly-Asp(tBu)-OH	/	≥99.5%	/	≤0.15%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
11	Boc-Cys(Trt)-OH	21947-98-8	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
12	Boc-Arg(pbf)-OH	200124-22-7	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
13	Boc-Ala-OH	15761-38-3	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
14	Boc-D-Phe-OH	18942-49-9	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
15	Boc-Gly-OH	4530-20-5	≥99.5%	/	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
16	Boc-Lys(Boc)-OH.DCHA	15098-69-8	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
17	Boc-Ser(tBu)-OH	7738-22-9	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
18	Boc-Thr(tBu)-OH	13734-40-2	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
19	Boc-D-Ala-OH	7764-95-6	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
20	Boc-Met-OH	2488-15-5	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
21	Boc-Tyr(tBu)-OH	47375-34-8	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
22	Boc-D-Arg(pdf)-OH	187618-60-6	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
23	Boc-Asp(OtBu)-OH.DCHA	1913/12/8	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
24	Fmoc-HomoArg(pbf)-OH	1159680-21-3	≥98.5%	≤0.2%	/	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
25	Fmoc-Asp-OtBu	129460-09-9	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
26	Fmoc-Tyr(Me)-OH	77128-72-4	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
27	Fmoc-Orn(Boc)-OH	109425-55-0	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
28	Fmoc-D-Tyr(Et)-OH	162502-65-0	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
29	Fmoc-Asp(OAll)-OH	146982-24-3	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
30	Ac-Nle-OH	15891-49-3	≥99.0%	/	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%

NO	Product	CAS No	Key quality indicator							
			purity	isomer	Specific impurity	Maximum unknown impurity	acetic acid	Ethyl acetate	Alcohol	Moisture
31	Fmoc-Nle-OH	77284-32-3	≥99.0%	/	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
32	Ac-Glu(OtBu)-OH	84192-88-1	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
33	Ac-β-Ala-OH-DCHA	/	≥99.0%	/	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
34	Fmoc-β-Ala-OH	35737-10-1	≥99.5%	/	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
35	Fmoc-Hyp(tBu)-OH	122996-47-8	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
36	Fmoc-Thi-OH	130309-35-2	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
37	Fmoc-D-Tic-OH	130309-33-0	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
38	Fmoc-Oic-OH	130309-37-4	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
39	Boc-Sar-OH	13734-36-6	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
40	Fmoc-Sar-OH	77128-70-2	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
41	Fmoc-Tyr(SO <sub>3</sub> Na)-OH.H <sub>2</sub> O	106864-37-3	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
42	Fmoc-D-Asp(OtBu)-OH	112883-39-3	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
43	Ac-Ser(tBu)-OH	77285-09-7	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
44	Boc-HomoCys(Trt)-OH	201419-16-1	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
45	Fmoc-HomoCys(Trt)-OH	167015-23-8	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
46	Fmoc-Dab-OH	161420-87-7	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%

## Product List

## Part V – D-Amino Acid

NO	Product	CAS No	Key quality indicator							
			purity	isomer	Specific impurity	Maximum unknown impurity	acetic acid	Ethyl acetate	Alcohol	Moisture
1	Fmoc-D-Ala-OH.H <sub>2</sub> O	79990-15-1	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤6.5%
2	Fmoc-3-(2-naphthyl)-D-Ala-OH	138774-94-4	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
3	Ac-3-(2-naphthyl)-D-Ala-OH	37440-01-0	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
4	Fmoc-3-(3-pyridinyl)-D-Ala-OH	142994-45-4	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
5	Fmoc-D-Aph(tBuCbm)-OH	1433975-21-3	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
6	Fmoc-D-Aph(Cbm)-OH	324017-22-3	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
7	Fmoc-D-Aph(Hor)-OH	NA	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
8	Fmoc-Aph(D-Hor)-OH	NA	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
9	Fmoc-D-Arg(pbf)-OH	187618-60-6	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
10	Fmoc-D-Arg(NO <sub>2</sub> )-OH	160347-94-4	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
11	Fmoc-D-HomoArg(pbf)-OH	401915-53-5	≥99.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
12	Fmoc-D-HomoArg(Et) <sub>2</sub> -OH	NA	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
13	Fmoc-D-Asn(Trt)-OH	180570-71-2	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
14	Fmoc-D-Asp(OtBu)-OH	112883-39-3	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
15	Fmoc-D-Asp-OtBu	34098-70-7	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
16	Fmoc-D-Asp(OAll)-OH	177609-12-0	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
17	Fmoc-D-Cit-OH	200344-33-8	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
18	Fmoc-D-Cys(Trt)-OH	167015-11-4	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
19	Fmoc-D-Cys(Acm)-OH	168300-88-7	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
20	Fmoc-D-Cys(Mmt)-OH	1198791-73-9	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
21	Fmoc-D-Gln(Trt)-OH	200623-62-7	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
22	Fmoc-D-Glu(OtBu)-OH.H <sub>2</sub> O	104091-08-9	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤5.0%
23	Fmoc-D-Glu-OtBu	109745-15-5	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
24	H-D-Glu-OtBu	25456-76-2	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
25	Fmoc-D-His(Trt)-OH	135610-90-1	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
26	Boc-D-His(Trt)-OH	393568-74-6	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
27	Fmoc-D-His(Bzl)-OH	1417638-37-9	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
28	Fmoc-D-Ile-OH	143688-83-9	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
29	Fmoc-D-Allo-Ile-OH	118904-37-3	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
30	Fmoc-D-Leu-OH	114360-54-2	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
31	Fmoc-D-Lys(Boc)-OH	92122-45-7	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
32	Fmoc-D-Lys(Alloc)-OH	214750-75-1	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
33	Fmoc-D-Lys(ivDde)-OH	1272755-33-5	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
34	Fmoc-D-Lys(Mmt)-OH	198544-94-4	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%

NO	Product	CAS No	Key quality indicator							
			purity	isomer	Specific impurity	Maximum unknown impurity	acetic acid	Ethyl acetate	Alcohol	Moisture
35	Fmoc-D-Lys(iPr,Boc)-OH	NA	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
36	Fmoc-D-Lys(nicotinoyl)-OH	252049-12-0	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
37	Fmoc-D-Met-OH	112883-40-6	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
38	Fmoc-D-Orn(Boc)-OH	118476-89-4	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
39	Fmoc-D-Phe-OH	86123-10-6	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
40	Fmoc-4-chloro-D-Phe-OH	142994-19-2	≥99.0%	≤0.2%	≤0.3%	≤0.3%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
41	Fmoc-D-Pro-OH.H <sub>2</sub> O	101555-62-8	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤6.0%
42	D-Pyr-OH	4042-36-8	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
43	Fmoc-D-Ser(tBu)-OH	128107-47-1	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
44	Fmoc-D-Ser(Trt)-OH	212688-51-2	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
45	Fmoc-D-Thr(tBu)-OH	138797-71-4	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
46	Fmoc-D-Trp(Boc)-OH	163619-04-3	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
47	Fmoc-2-methyl-D-Trp-OH	196808-79-4	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤2.0%
48	Fmoc-D-Tyr(tBu)-OH	118488-18-9	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
49	Fmoc-D-Tyr(Et)-OH	162502-65-0	≥99.5%	≤0.1%	≤0.1%	≤0.2%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
50	Fmoc-D-Tyr(Me)-OH	201335-88-8	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
51	Fmoc-N-Me-D-Tyr(tBu)-OH	196808-79-4	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
52	Fmoc-D-Tyr(Bzl)-OH	138775-48-1	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
53	Fmoc-D-Val-OH	84624-17-9	≥98.5%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
54	Fmoc-D-Hyp(tBu)-OH	464193-92-8	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
55	Fmoc-D-Thi-OH	201532-42-5	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
56	Fmoc-D-Tic-OH	130309-33-0	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
57	Fmoc-D-Oic-OH	130309-37-4	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
58	Boc-D-His(Trt)-Aib-OH	NA	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
59	Fmoc-D-Glu(OtBu)-Gly-OH	NA	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
60	Boc-D-His(Trt)-Aib-Glu(OtBu)-Gly-OH	NA	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
61	Boc-His(Trt)-Aib-D-Glu(OtBu)-Gly-OH	NA	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
62	Boc-D-His(Trt)-Aib-D-Glu(OtBu)-Gly-OH	NA	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
63	Fmoc-D-Arg(pbf)-Gly-OH	NA	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
64	Fmoc-D-Ala-Ala-OH	NA	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
65	Fmoc-Ala-D-Ala-OH	NA	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
66	Fmoc-D-Ala-D-Ala-OH	NA	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
67	Fmoc-D-Lys(Palm-Glu-OtBu)-OH	NA	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
68	Fmoc-Lys(Palm-D-Glu-OtBu)-OH	NA	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
69	Fmoc-D-Lys(Palm-D-Glu-OtBu)-OH	NA	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
70	Octa(OtBu)-D-Glu-OtBu	NA	≥98.0%	≤0.2%	≤0.3%	≤0.5%	≤0.02%	≤0.5%	≤0.5%	≤1.0%
71	Octa(OtBu)-D-Glu(α-OtBu)-AEEA-AEEA-OH	NA	≥95.0%	≤0.5%	≤1.0%	≤2.0%	≤0.02%	≤0.5%	≤0.5%	≤1.0%

## Product List

## Part VI – Impurity of Amino Acid

NO	Product	CAS No	Key quality indicator			
			purity	Maximum impurity	Total solvent residue	Moisture
1	Fmoc-β-Ala-Ala-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
2	Fmoc-D-Ala-D-Ala-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
3	Fmoc-β-Ala-D-Ala-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
4	Fmoc-Arg(pbf)-Arg(pbf)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
5	Fmoc-β-Ala-Arg(pbf)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
6	Fmoc-D-Arg(pbf)-D-Arg(pbf)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
7	Fmoc-β-Ala-D-Arg(pbf)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
8	Fmoc-HomoArg(pbf)-HomoArg(pbf)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
9	Fmoc-β-Ala-HomoArg(pbf)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
10	Fmoc-Asn(Trt)-Asn(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
11	Fmoc-β-Ala-Asn(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
12	Fmoc-Asp(OtBu)-Asp(OtBu)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
13	Fmoc-β-Ala-Asp(OtBu)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
14	Fmoc-Cys(Trt)-Cys(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
15	Fmoc-β-Ala-Cys(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
16	Fmoc-Cys(Acm)-Cys(Acm)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
17	Fmoc-β-Ala-Cys(Acm)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
18	Fmoc-Gln(Trt)-Gln(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
19	Fmoc-β-Ala-Gln(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
20	Fmoc-Glu(OtBu)-Glu(OtBu)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
21	Fmoc-β-Ala-Glu(OtBu)-OH.H2O	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
22	Fmoc-β-Ala-Gly-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
23	Fmoc-His(Trt)-His(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
24	Fmoc-β-Ala-His(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
25	Fmoc-Ile-Ile-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
26	Fmoc-β-Ala-Ile-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
27	Fmoc-Leu-Leu-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
28	Fmoc-β-Ala-Leu-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%



NO	Product	CAS No	Key quality indicator			
			purity	Maximum impurity	Total solvent residue	Moisture
29	Fmoc-D-Leu-D-Leu-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
30	Fmoc-β-Ala-D-Leu-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
31	Fmoc-Lys(Boc)-Lys(Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
32	Fmoc-β-Ala-Lys(Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
33	Fmoc-Lys(Alloc)-Lys(Alloc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
34	Fmoc-β-Ala-Lys(Alloc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
35	Fmoc-Met-Met-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
36	Fmoc-β-Ala-Met-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
37	Fmoc-Orn(Boc)-Orn(Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
38	Fmoc-β-Ala-Orn(Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
39	Fmoc-Phe-Phe-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
40	Fmoc-β-Ala-Phe-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
41	Fmoc-D-Phe-D-Phe-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
42	Fmoc-β-Ala-D-Phe-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
43	Fmoc-Pro-Pro-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
44	Fmoc-β-Ala-Pro-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
45	Fmoc-Ser(tBu)-Ser(tBu)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
46	Fmoc-β-Ala-Ser(tBu)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
47	Fmoc-Ser(Trt)-Ser(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
48	Fmoc-β-Ala-Ser(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
49	Fmoc-Thr(tBu)-Thr(tBu)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
50	Fmoc-β-Ala-Thr(tBu)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
51	Fmoc-Trp(Boc)-Trp(Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
52	Fmoc-β-Ala-Trp(Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
53	Fmoc-D-Trp(Boc)-D-Trp(Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
54	Fmoc-β-Ala-D-Trp(Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
55	Fmoc-Tyr(tBu)-Tyr(tBu)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
56	Fmoc-β-Ala-Tyr(tBu)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
57	Fmoc-D-Tyr(Et)-D-Tyr(Et)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
58	Fmoc-β-Ala-D-Tyr(Et)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
59	Fmoc-Tyr(Me)-Tyr(Me)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
60	Fmoc-β-Ala-Tyr(Me)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%

NO	Product	CAS No	Key quality indicator			
			purity	Maximum impurity	Total solvent residue	Moisture
61	Fmoc-Val-Val-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
62	Fmoc-β-Ala-Val-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
63	Fmoc-D-Cit-D-Cit-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
64	Fmoc-β-Ala-D-Cit-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
65	Fmoc-β-Ala-Dab-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
66	Fmoc-(3-(2-naphthyl)-D-Ala) <sub>2</sub> -OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
67	Fmoc-β-Ala-3-(2-naphthyl)-D-Ala-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
68	Fmoc-(3-(3-pyridinyl)-D-Ala) <sub>2</sub> -OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
69	Fmoc-β-Ala-3-(3-pyridinyl)-D-Ala-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
70	Fmoc-(4-chloro-D-Phe) <sub>2</sub> -OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
71	Fmoc-β-Ala-4-chloro-D-Phe-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
72	Fmoc-(D-4Aph(tBuCbm)) <sub>2</sub> -OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
73	Fmoc-β-Ala-D-4Aph(tBuCbm)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
74	Fmoc-Aph(L-Hor)-Aph(L-Hor)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
75	Fmoc-β-Ala-Aph(L-Hor)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
76	Fmoc-Lys(iPr,Boc)-Lys(iPr,Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
77	Fmoc-β-Ala-Lys(iPr,Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
78	Fmoc-β-Ala-AEEA-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
79	Fmoc-Aib-Aib-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
80	Fmoc-β-Ala-Aib-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
81	Fmoc-Arg-OH	91000-69-0	≥98.0%	≤1.0%	≤8.0%	≤2.0%
82	H-Arg(pbf)-OH	200115-86-2	≥98.0%	≤1.0%	≤8.0%	≤2.0%
83	Fmoc-D-Arg-OH	130752-32-8	≥98.0%	≤1.0%	≤8.0%	≤2.0%
84	H-D-Arg(pbf)-OH	200116-81-0	≥98.0%	≤1.0%	≤8.0%	≤2.0%
85	Fmoc-HomoArg-OH.HCl	208174-14-5	≥98.0%	≤1.0%	≤8.0%	≤2.0%
86	H-HomoArg(pbf)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
87	Fmoc-D-HomoArg-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
88	H-D-HomoArg(pbf)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
89	Fmoc-Asn-OH	71989-16-7	≥98.0%	≤1.0%	≤8.0%	≤2.0%
90	H-Asn(Trt)-OH	132388-58-0	≥98.0%	≤1.0%	≤8.0%	≤2.0%
91	Fmoc-Asp-OH	119062-05-4	≥98.0%	≤1.0%	≤8.0%	≤2.0%
92	H-Asp(OtBu)-OH	3057-74-7	≥98.0%	≤1.0%	≤8.0%	≤2.0%

NO	Product	CAS No	Key quality indicator			
			purity	Maximum impurity	Total solvent residue	Moisture
93	Fmoc-Cys-OH	135248-89-4	≥98.0%	≤1.0%	≤8.0%	≤2.0%
94	H-Cys(Trt)-OH	2799-07-7	≥98.0%	≤1.0%	≤8.0%	≤2.0%
95	H-Cys(Acm)-OH.HCl	28798-28-9	≥98.0%	≤1.0%	≤8.0%	≤2.0%
96	Fmoc-Gln-OH	71989-20-3	≥98.0%	≤1.0%	≤8.0%	≤2.0%
97	H-Gln(Trt)-OH	102747-84-2	≥98.0%	≤1.0%	≤8.0%	≤2.0%
98	Fmoc-Glu-OH	121343-82-6	≥98.0%	≤1.0%	≤8.0%	≤2.0%
99	H-Glu(OtBu)-OH.H <sub>2</sub> O	2419-56-9	≥98.0%	≤1.0%	≤8.0%	≤2.0%
100	Fmoc-His-OH	116611-64-4	≥98.0%	≤1.0%	≤8.0%	≤2.0%
101	H-His(Trt)-OH	35146-32-8	≥98.0%	≤1.0%	≤8.0%	≤2.0%
102	Boc-His-OH	17791-52-5	≥98.0%	≤1.0%	≤8.0%	≤2.0%
103	Fmoc-Lys-OH	105047-45-8	≥98.0%	≤1.0%	≤8.0%	≤2.0%
104	H-Lys(Boc)-OH	2418-95-3	≥98.0%	≤1.0%	≤8.0%	≤2.0%
105	H-Lys(Alloc)-OH	6298-03-9	≥98.0%	≤1.0%	≤8.0%	≤2.0%
106	Fmoc-Orn-OH.HCl	201046-57-3	≥98.0%	≤1.0%	≤8.0%	≤2.0%
107	H-Orn(Boc)-OH	13650-49-2	≥98.0%	≤1.0%	≤8.0%	≤2.0%
108	Fmoc-Ser-OH	73724-45-5	≥98.0%	≤1.0%	≤8.0%	≤2.0%
109	H-Ser(tBu)-OH	18822-58-7	≥98.0%	≤1.0%	≤8.0%	≤2.0%
110	H-Ser(Trt)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
111	Fmoc-Thr-OH.H <sub>2</sub> O	<b>73731-37-0</b>	≥98.0%	≤1.0%	≤8.0%	≤2.0%
112	H-Thr(tBu)-OH	4378-13-6	≥98.0%	≤1.0%	≤8.0%	≤2.0%
113	Fmoc-Trp-OH	35737-15-6	≥98.0%	≤1.0%	≤8.0%	≤2.0%
114	H-Trp(Boc)-OH	146645-63-8	≥98.0%	≤1.0%	≤8.0%	≤2.0%
115	Fmoc-D-Trp-OH	86123-11-7	≥98.0%	≤1.0%	≤8.0%	≤2.0%
116	H-D-Trp(Boc)-OH	201290-11-1	≥98.0%	≤1.0%	≤8.0%	≤2.0%
117	Fmoc-Tyr-OH	92954-90-0	≥98.0%	≤1.0%	≤8.0%	≤2.0%
118	H-Tyr(tBu)-OH	18822-59-8	≥98.0%	≤1.0%	≤8.0%	≤2.0%
119	Fmoc-D-Tyr-OH	112883-29-1	≥98.0%	≤1.0%	≤8.0%	≤2.0%
120	H-D-Tyr(Et)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
121	H-Tyr(Me)-OH.HCl	67423-44-3	≥98.0%	≤1.0%	≤8.0%	≤2.0%
122	Fmoc-D-4Aph(Cbm)-OH	324017-22-3	≥98.0%	≤1.0%	≤8.0%	≤2.0%
123	H-D-4Aph(tBuCbm)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
124	Fmoc-Lys(iPr)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%
125	H-Lys(iPr,Boc)-OH	NA	≥98.0%	≤1.0%	≤8.0%	≤2.0%