



— AADs & PEPTIDE FRAGMENTS

Start with the right building block.

200+ protected amino acid derivatives and peptide fragments, synthesised in Dielsdorf (Switzerland) since 1963.

200+

CATALOGUE ITEMS

60+

YEARS, SINCE 1963

40+

MERS MADE ROUTINELY

cGMP

SWISSMEDIC · US FDA

Your building block supplier is also your CDMO

SENN manufactures at its own Swissmedic-approved, US FDA-inspected site in Dielsdorf. Starting with a 10 g sample can develop the fragment at 10 kg and the drug substance at metric tonne – on chemistry it owns.

01

Made, not just supplied

Our routes and our release – where sourcing serves you better.

02

It scales past the catalogue

SPPS to a few kilograms; LPPS above 5 kg to metric tons; hybrid and TAPS where they win.

03

Clean before it was required

DMF- and CMR-solvent-free developments; four years TFA-free. EU-compliance without reformulating.

04

Beyond the list

Route finding, development, scale-up and validation – 40+ mer peptides and PDCs.

COMMERCIAL cGMP CAPACITIES

Multi-purpose glass-lined reactors 100–2500 L

Hydrogenation reactors 630–2500 L

Solid-phase reactors 0.25–400 L

Preparative HPLC

Nutsche filters, drying & lyophilisation

Not on the list? We still make it.

SALES@SENNCHEM.COM

What's in this catalogue

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HOW TO READ THE TABLES

N-terminus — Free (H) or protected (Fmoc, Boc, Z, etc.)

Side-chain PGs — side-chain unprotected = -; N/A = absence of side-chain to be protected

C-terminus — free (acid), protected (ester) or activated (OSu, ONp, NCA).

CAS # — CAS Registry Number (if applicable).

Fmoc-protected amino acid derivatives (Fmoc-AADs)

43 items

Fmoc-AADs commonly used in SPPS, hybrid and TAPS strategies.

C-TERMINAL CARBOXYLIC ACIDS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Fmoc-Aib-OH	Fmoc	N/A	acid	94744-50-0
Fmoc-Ala-OH	Fmoc	N/A	acid	35661-39-3
Fmoc-Arg(Pbf)-OH	Fmoc	Pbf	acid	154445-77-9
Fmoc-Arg(Pmc)-OH	Fmoc	Pmc	acid	119831-72-0
Fmoc-Asp(OtBu)-OH	Fmoc	OtBu	acid	71989-14-5
Fmoc-Cys(Acm)-OH	Fmoc	Acm	acid	86060-81-3
Fmoc-Cys(S-tBu)-OH	Fmoc	S-tBu	acid	67436-13-9
Fmoc-Cys(Trt)-OH	Fmoc	Trt	acid	103213-32-7
Fmoc-D-2-Nal-OH	Fmoc	N/A	acid	138774-94-4
Fmoc-D-Dab(Boc)-OH	Fmoc	Boc	acid	114360-56-4
Fmoc-D-Har(Et) ₂ -OH	Fmoc	N/A	acid	1386327-10-1
Fmoc-D-Phe(4-Cl)-OH	Fmoc	N/A	acid	142994-19-2
Fmoc-D-Phe-OH	Fmoc	N/A	acid	86123-10-6
Fmoc-D-Trp(Boc)-OH	Fmoc	Boc	acid	163619-04-3
Fmoc-Gln(Trt)-OH	Fmoc	Trt	acid	132327-80-1
Fmoc-Gln-OH	Fmoc	—	acid	71989-20-3

C-TERMINAL CARBOXYLIC ACIDS (CONTINUED)

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Fmoc-Glu(OtBu)-OH	Fmoc	OtBu	acid	71989-18-9
Fmoc-Gly-OH	Fmoc	N/A	acid	29022-11-5
Fmoc-Har(Et) ₂ -OH	Fmoc	N/A	acid	1386327-04-3
Fmoc-His(Mtt)-OH	Fmoc	Mtt	acid	133367-34-7
Fmoc-His(Trt)-OH	Fmoc	Trt	acid	109425-51-6
Fmoc-Hyp(Bcc)-OH	Fmoc	Bcc	acid	187223-15-0
Fmoc-Hyp(tBu)-OH	Fmoc	tBu	acid	122996-47-8
Fmoc-Ile-OH	Fmoc	N/A	acid	71989-23-6
Fmoc-Leu-OH	Fmoc	N/A	acid	35661-60-0
Fmoc-Lys(Ac)-OH	Fmoc	N/A	acid	159766-56-0
Fmoc-Lys(Boc)-OH	Fmoc	Boc	acid	71989-26-9
Fmoc-Met-OH	Fmoc	N/A	acid	71989-28-1
Fmoc-Phe-OH	Fmoc	N/A	acid	35661-40-6
Fmoc-Phg-OH	Fmoc	N/A	acid	102410-65-1
Fmoc-Pro-OH	Fmoc	N/A	acid	71989-31-6
Fmoc-Ser(tBu)-OH	Fmoc	tBu	acid	71989-33-8
Fmoc-Thr(tBu)-OH	Fmoc	tBu	acid	71989-35-0
Fmoc-Thr-OH	Fmoc	—	acid	73731-37-0
Fmoc-Trp(Boc)-OH	Fmoc	Boc	acid	143824-78-6
Fmoc-Tyr(Bzl)-OH	Fmoc	Bzl	acid	71989-40-7
Fmoc-Tyr(Me)-OH	Fmoc	N/A	acid	77128-72-4

C-TERMINAL CARBOXYLIC ACIDS (CONTINUED)

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Fmoc-Tyr(tBu)-OH	Fmoc	tBu	acid	71989-38-3
Fmoc-Val-OH	Fmoc	N/A	acid	68858-20-8
Fmoc- α -Me-Leu-OH	Fmoc	N/A	acid	312624-65-0

C-TERMINAL ESTERS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Fmoc-Glu-OtBu	Fmoc	—	tBu ester	84793-07-7

SALTS / HYDRATES

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Fmoc-Ala-OH · H ₂ O	Fmoc	N/A	acid	35661-39-3
Fmoc-Glu(OtBu)-OH · H ₂ O	Fmoc	OtBu	acid	71989-18-9

Boc-protected amino acid derivatives 41 items

(Boc-AADs)

Boc-AADs, activated Boc-AADs and Boc-AAD esters.

ACTIVATED CARBOXYLIC ACID DERIVATIVES

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Boc-Ala-OSu	Boc	N/A	OSu	3392-05-0
Boc-Asn-ONp	Boc	—	ONp	4587-33-1
Boc-Cys(Acm)-ONp	Boc	Acm	ONp	58651-76-6
Boc-Cys(Bzl)-OSu	Boc	Bzl	OSu	3401-33-0

ACTIVATED CARBOXYLIC ACID DERIVATIVES (CONTINUED)

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Boc-Gln-ONp	Boc	—	ONp	15387-45-8
Boc-Glu(OtBu)-OSu	Boc	OtBu	OSu	32886-55-8
Boc-Gly-OSu	Boc	N/A	OSu	3392-07-2
Boc-Ile-NCA	Boc	N/A	NCA	145929-76-6
Boc-Lys(Boc)-OSu	Boc	Boc	OSu	30189-36-7
Boc-Thr(Bzl)-OSu	Boc	Bzl	OSu	32886-43-4

C-TERMINAL CARBOXYLIC ACIDS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Boc-Ala-OH	Boc	N/A	acid	15761-38-3
Boc-Cys(Acm)-OH	Boc	Acm	acid	19746-37-3
Boc-Cys(Bzl)-OH	Boc	Bzl	acid	5068-28-0
Boc-Cys(Fm)-OH	Boc	Fm	acid	84888-35-7
Boc-Cys(Trt)-OH	Boc	Trt	acid	21947-98-8
Boc-D-2-Nal-OH	Boc	N/A	acid	76985-10-9
Boc-D-Phe-OH	Boc	N/A	acid	18942-49-9
Boc-D-Trp(For)-OH	Boc	For	acid	64905-10-8
Boc-D-Tyr(tBu)-OH	Boc	tBu	acid	507276-74-6
Boc-D-Tyr-OH	Boc	—	acid	70642-86-3
Boc-Dab(Z)-OH	Boc	Z	acid	3350-20-7
Boc-Dab-OH	Boc	—	acid	25691-37-6
Boc-Gln-OH	Boc	—	acid	13726-85-7

C-TERMINAL CARBOXYLIC ACIDS (CONTINUED)

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Boc-Glu(OtBu)-OH	Boc	OtBu	acid	13726-84-6
Boc-His(Tos)-OH	Boc	Tos	acid	35899-43-5
Boc-His-OH	Boc	—	acid	17791-52-5
Boc-Ile-OH	Boc	N/A	acid	13139-16-7
Boc-L-Tyr(tBu)-OH	Boc	tBu	acid	47375-34-8
Boc-Leu-OH	Boc	N/A	acid	13139-15-6
Boc-Lys(Boc)-OH	Boc	Boc	acid	2483-46-7
Boc-Orn(Z)-OH	Boc	Z	acid	2480-93-5
Boc-Pro-OH	Boc	N/A	acid	15761-39-4
Boc-Sar-OH	Boc	N/A	acid	13734-36-6
Boc-Ser-OH	Boc	—	acid	3262-72-4
Boc-Thr(Bzl)-OH	Boc	Bzl	acid	15260-10-3
Boc-Thr-OH	Boc	—	acid	2592-18-9
Boc-Trp(For)-OH	Boc	For	acid	47355-10-2
Boc-Tyr-OH	Boc	—	acid	3978-80-1

C-TERMINAL ESTERS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Boc-Dab(Z)-OBzl	Boc	Z	benzyl ester	—

SALTS / HYDRATES

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Boc-Arg-OH · HCl	Boc	—	acid	35897-34-8

SALTS / HYDRATES (CONTINUED)

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Boc-D-Arg-OH · HCl	Boc	—	acid	113712-06-4

Z-protected amino acid derivatives

26 items

Cbz/Z-protected AADs and related derivatives.

ACTIVATED CARBOXYLIC ACID DERIVATIVES

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Z-Glu(OtBu)-OSu	Z	OtBu	OSu	4666-16-4
Z-Gly-OSu	Z	N/A	OSu	2899-60-7
Z-Pro-OSu	Z	N/A	OSu	3397-33-9

C-TERMINAL AMIDES

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Z-Arg(Pbf)-NH ₂	Z	Pbf	amide	—

C-TERMINAL CARBOXYLIC ACIDS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Z-Arg-OH	Z	—	acid	1234-35-1
Z-β-Ala-OH	Z	N/A	acid	2304-94-1
Z-D-Leu-OH	Z	N/A	acid	28862-79-5
Z-D-Ser(tBu)-OH	Z	tBu	acid	65806-90-8
Z-D-Trp-OH	Z	—	acid	2279-15-4

C-TERMINAL CARBOXYLIC ACIDS (CONTINUED)

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Z-Gln-OH	Z	—	acid	2650-64-8
Z-Glu(OBzl)-OH	Z	OBzl	acid	5680-86-4
Z-Gly-OH	Z	N/A	acid	1138-80-3
Z-His-OH	Z	—	acid	14997-58-1
Z-Ile-OH	Z	N/A	acid	3160-59-6
Z-Leu-OH	Z	N/A	acid	2018-66-8
Z-Lys(Boc)-OH	Z	Boc	acid	2389-60-8
Z-Orn(Boc)-OH	Z	Boc	acid	7733-29-1
Z-Phe-OH	Z	N/A	acid	1161-13-3
Z-Pro-OH	Z	N/A	acid	1148-11-4
Z-Ser(tBu)-OH	Z	tBu	acid	1676-75-1
Z-Thr(tBu)-OH	Z	tBu	acid	16966-09-9
Z-Trp-OH	Z	—	acid	7432-21-5
Z-Tyr(tBu)-OH	Z	tBu	acid	5545-54-0

C-TERMINAL CARBOXYLIC ESTERS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Z-Asn-OtBu	Z	—	tBu ester	25456-85-3
Z-D-Trp(Boc)-OBzl	Z	Boc	benzyl ester	—
Z-Glu(OBzl)-OtBu	Z	OBzl	tBu ester	3967-18-8

N-terminal unprotected amino acid derivatives, salts and esters

36 items

N-terminal unprotected amino acid derivatives, C-terminal esters/amides and alcohols.

C-TERMINAL AMIDES / ALCOHOLS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
H-Arg(Pbf)-NH ₂	H	Pbf	amide	—
H-Thr-ol	H	—	alcohol	3228-51-1

C-TERMINAL CARBOXYLIC ACIDS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
H-2-Abu-OH	H	—	acid	1492-24-6
H-Aib-OH	H	N/A	acid	62-57-7
H-Arg(Pmc)-OH	H	Pmc	acid	112160-37-9
H-Cys(Acm)-OH	H	Acm	acid	19647-70-2
H-Cys(Bzl)-OH	H	Bzl	acid	3054-01-1
H-D-Trp(Boc)-OH	H	Boc	acid	201290-11-1
H-Glu(OtBu)-OH	H	OtBu	acid	2419-56-9
H-Lys(Boc)-OH	H	Boc	acid	2418-95-3
H-Lys(Z)-OH	H	Z	acid	1155-64-2
H-Lys-OH	H	—	acid	56-87-1
H-Orn(Boc)-OH	H	Boc	acid	13650-49-2
H-Orn(Z)-OH	H	Z	acid	3304-51-6

C-TERMINAL CARBOXYLIC ACIDS (CONTINUED)

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
H-Trp(Boc)-OH	H	Boc	acid	146645-63-8
H-Val-OH	H	N/A	acid	72-18-4
pGlu-OH	H	N/A	acid	98-79-3

C-TERMINAL CARBOXYLIC ESTERS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
H-Asn-OtBu	H	—	tBu ester	25456-86-4
H-Dab(Z)-OBzl	H	Z	benzyl ester	—
H-Glu-OtBu	H	—	tBu ester	45120-30-7
H-Gly-OBzl	H	N/A	benzyl ester	—
H-Gly-OEt	H	N/A	ethyl ester	459-73-4
H-Ile-OMe	H	N/A	methyl ester	—
H-Leu-OMe	H	N/A	methyl ester	—
H-Lys(Z)-OBzl	H	Z	benzyl ester	24458-14-8
H-Phe-OMe	H	N/A	methyl ester	2577-90-4
H-Pro-OtBu	H	N/A	tBu ester	2812-46-6
H-Thr(tBu)-OtBu	H	tBu	tBu ester	5854-78-4
H-Thr-OBzl	H	—	benzyl ester	—
H-Thr-OMe	H	—	methyl ester	3373-59-9
H-Trp-OBzl	H	—	benzyl ester	—
H-Tyr(tBu)-OtBu	H	tBu	tBu ester	—
H-Tyr-OEt	H	—	ethyl ester	949-67-7

C-TERMINAL ESTERS (CONTINUED)

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
H-Tyr-OMe	H	—	methyl ester	1080-06-4
H-Val-OMe	H	N/A	methyl ester	4070-48-8

SALTS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
H-Cys-OH · HCl	H	—	acid	52-89-1

Lipidated building blocks

2 items

Lipidated amino acid building blocks and intermediates.

C-TERMINAL CARBOXYLIC ACIDS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Pal-Lys(Boc)-OH	Pal	Boc	acid	35665-38-4
Pal-Lys(Z)-OH	Pal	Z	acid	—

MPA building blocks

2 items

Mpa derivatives used in peptide synthesis.

C-TERMINAL AMIDES

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Mpa(Bzl)-NH ₂	N/A	Bzl	amide	22437-42-9

C-TERMINAL CARBOXYLIC ACIDS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Mpa(Acm)-OH	N/A	Acm	acid	52574-08-0

Peptide fragments and advanced intermediates

44 items

Advanced protected peptide fragments, dipeptides, tripeptides and lipidated intermediates for complex peptide assembly.

FRAGMENTS — C-TERMINAL ESTERS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Boc-Dab(Z)-Thr-OBzl	Boc	Z, -	benzyl ester	—
Boc-His(Boc)-Lys(Z)-OBzl	Boc	Boc, Z	benzyl ester	—
Boc-Lys(Z)-Thr-OBzl	Boc	Z, -	benzyl ester	—
Boc-Lys(Z)-Val-OMe	Boc	Z, N/A	methyl ester	—
Boc-Val-Lys(Z)-OBzl	Boc	N/A, Z	benzyl ester	—

FRAGMENTS — C-TERMINAL ESTERS (CONTINUED)

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
H-Dab(Z)-Thr-OBzl	H	Z, -	benzyl ester	—
H-His-Lys(Z)-OBzl	H	-, Z	benzyl ester	—
H-Lys(Z)-Thr-OBzl	H	Z, -	benzyl ester	—
H-Tyr-Leu-OMe	H	-, N/A	methyl ester	—
H-Val-His-OMe	H	N/A, -	methyl ester	—
H-Val-Lys(Z)-OBzl	H	N/A, Z	benzyl ester	—
H-β-Ala-OBzl	H	N/A	benzyl ester	—
Pal-Lys(Z)-Thr-OBzl	Pal	Z, -	benzyl ester	—
Z-Arg-Pro-OtBu	Z	-, N/A	tBu ester	—
Z-Asn-Thr(tBu)-OMe	Z	-, tBu	methyl ester	—
Z-D-Trp-OBzl	Z	-, N/A	benzyl ester	—
Z-Pro-Pro-OBzl	Z	N/A, N/A	benzyl ester	—
Z-Trp-Pro-OBzl	Z	-, N/A	benzyl ester	—

FRAGMENTS — N-TERMINAL BOC PROTECTED

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Boc-Glu(OtBu)-Gly-OH	Boc	OtBu, N/A	acid	—
Boc-Gly-Gly-Gly-OH	Boc	N/A, N/A, N/A	acid	28320-73-2
Boc-Lys(Z)-Val-OH	Boc	Z, N/A	acid	—
Boc-Thr-Thr-OH	Boc	-, -	acid	—

FRAGMENTS — N-TERMINAL FMOC PROTECTED

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Fmoc-Ala-Thr(psiMe,Mepro)-OH	Fmoc	N/A	acid	—
Fmoc-D-Ala-OH	Fmoc	N/A	acid	—
Fmoc-D-Dab-OH	Fmoc	—	acid	—
Fmoc-D-Trp-OH	Fmoc	—	acid	—
Fmoc-Gly-Gly-OH	Fmoc	N/A, N/A	acid	35665-38-4
Fmoc-Gly-Pro-OH	Fmoc	N/A, N/A	acid	—
Fmoc-Gly-Ser(psiMe,Mepro)-OH	Fmoc	N/A	acid	—
Fmoc-His(Trt)-Gly-OH	Fmoc	Trt, N/A	acid	—
Fmoc-Lys(OtBu-St-Glu(AEEA) ₂ -OtBu)-OH	Fmoc	OtBu-St-Glu(AEEA) ₂	acid	—
Fmoc-Lys(Pal-Glu-OtBu)-OH	Fmoc	Pal-Glu-OtBu	acid	—
Fmoc-Lys(Pro-Z)-OH	Fmoc	Pro-Z	acid	—
Fmoc-Pro-Pro-OH	Fmoc	N/A, N/A	acid	129223-22-9
Fmoc-Thr(tBu)-Lys(Boc)-OH	Fmoc	tBu, Boc	acid	—

FRAGMENTS — N-TERMINAL Z PROTECTED

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
Z-Arg-Pro-OH	Z	—, N/A	acid	—
Z-D-Arg-Gly-OH	Z	—, N/A	acid	—
Z-Gly-Pro-OH	Z	N/A, N/A	acid	1160-54-9
Z-Lys(Boc)-Lys(Z)-OH	Z	Boc, Z	acid	—

FRAGMENTS — AMIDES / ALCOHOLS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
H-Pro-Ala-NH ₂	H	N/A, N/A	amide	123102-47-6
Z-Pro-Ala-NH ₂	Z	N/A, N/A	amide	—

FRAGMENTS — FREE N-TERMINUS

PRODUCT NAME	N-TERM	SIDE-CHAIN PG	C-TERM	CAS #
H-Cys(Bzl)-Pro-OH	H	Bzl, N/A	acid	—
H-Glu(OtBu)-Glu(OtBu)-OH	H	OtBu, OtBU	acid	—
H-Trp-Pro-OH	H	—, N/A	acid	—

SPECIFICATIONS, QUANTITIES, QUESTIONS

TALK TO US

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SALES & QUOTATIONS

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