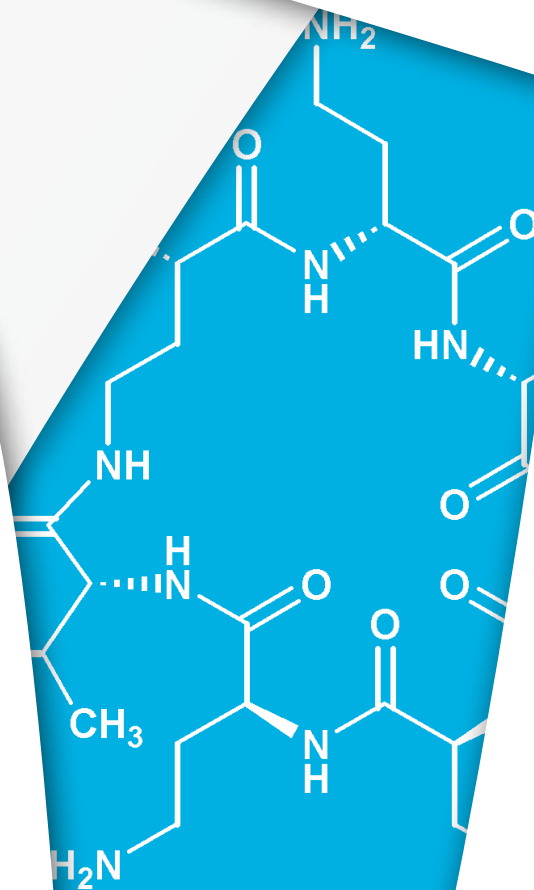


DAP AND DAB DERIVATIVES BACHEM

PIONEERING PARTNER FOR PEPTIDES

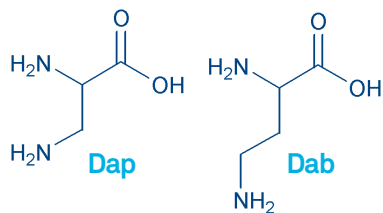


DAP AND DAB DERIVATIVES AVAILABLE FROM BACHEM

Derivatives of the α,ω -diaminocarboxylic acids α,β -diaminopropionic acid (Dap), α,γ -diaminobutyric acid (Dab), and related compounds.

Peptides containing α,ω -diamino acids can be readily and selectively modified at the ω -amino moiety when choosing an appropriate combination of protecting groups.

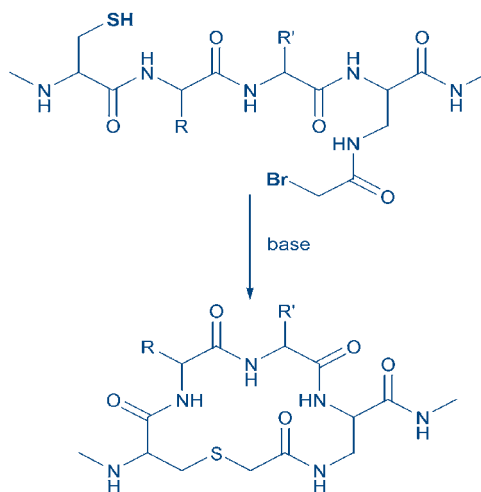
In addition to our comprehensive range of suitably protected Lys and Orn derivatives, Bachem offers a vast choice of derivatives of their homologs α,β -diaminopropionic acid (Dap) and α,γ -diaminobutyric acid (Dab), including appropriately protected building blocks for the synthesis of side-chain modified peptides.



UNUSUAL AMINO ACIDS

In addition to our comprehensive choice of derivatives of all stereoisomers of the 20 canonical amino acids we offer an extensive range of unusual amino acids, which can serve as building blocks for the synthesis of peptide analogs and can be used in structure-activity relationship (SAR) studies. Furthermore, these compounds are valuable chiral educts in organic synthesis.

The Boc/Z- or Fmoc/Boc-protected derivatives are suitable for standard SPPS, both enantiomers are available. Orthogonally protected Dap- and Dab-derivatives such as Fmoc-Dap(ivDde)-OH (B-3885) and Boc-Dab(Fmoc)-OH (A-3520) allow post-synthetic modification of peptides, e.g. lactam formation with the ω -carboxyl group of Asp or Glu. Branched structures as MAP-matrices or dendrimers can be obtained by introducing the N^α,N^ω -Boc/Boc or Fmoc/Fmoc-derivatives. The insertion of a Dap(bromoacetyl) residue yields peptides which will react with nucleophiles such as thiols:



Dap(Dnp)-derivatives (e.g. Fmoc-Dap(Dnp)-OH, B-2995) containing a lateral quencher moiety facilitate the synthesis of FRET substrates. Additionally, Bachem offers N^α -protected Dap and Dab derivatives which can be modified at the free N^ω as required by the customer.

For our offer of lysine and ornithine derivatives please see our online shop at shop.bachem.com

DAP DERIVATIVES

Both enantiomers of α,β -diaminopropionic acid (Dap, also abbreviated Dpr) inhibit the growth of microorganisms.

Derivatives of Dap have been detected in plants.

Dap(Dnp), N^β -(2,4-dinitrophenyl)-L- α,β -diaminopropionic acid, is also abbreviated as Dpa. Dpa derivatives are building blocks for FRET substrates. The dinitrophenyl moiety acts as a quencher. Dnp is often used in combination with the fluorophores Mca or Abz (anthranilic acid).

DAB DERIVATIVES

Dab, L- α,γ -diaminobutyric acid (or L- γ -aminohomoalanine, Aha), is a major constituent of the polymyxin peptide antibiotics. Dab is the precursor of the cyclic amidine ectoine found in high concentration in halobacteria. Ectoine is used as a stabilizer in skin care products.

In vitro, incubation with Dab irreversibly damages hepatoma cells.

The D-enantiomer of Dab is a constituent of the lipodepsipeptides syringomycin, syringostatin, and syringotoxin, bacterial phytotoxins, and the antimicrobial syringopeptins.

FMOC-DAP DERIVATIVES

Fmoc-Dap-OH
B-2385

Fmoc-D-Dap-OH
B-3055

Fmoc-Dap(Adpoc)-OH
B-2865

Fmoc-Dap(Aloc)-OH
B-2845

Fmoc-Dap(Boc)-OH
B-2380

Fmoc-D-Dap(Boc)-OH
B-2965

Fmoc-Dap(bromoacetyl)-OH
B-3770

Fmoc-Dap(Dnp)-OH
(Fmoc-Dpa-OH)
B-2995

Fmoc-Dap(Dnp)-SASRIN™-resin
(200-400 mesh)
D-2590

Fmoc-Dap(Fmoc)-OH
B-2265

Fmoc-Dap(ivDde)-OH
B-3885

BOC-DAP DERIVATIVES

Boc-Dap-OH
A-3220

Boc-D-Dap-OH
A-3590

Boc-Dap-OtBu
A-4715

Boc-Dap(Aloc)-OH
A-4115

Boc-Dap(Boc)-OH · DCHA
A-3475

Boc-Dap(bromoacetyl)-OH
A-4130

Boc-Dap(Dnp)-OH
(Boc-Dpa-OH)
A-4290

Boc-Dap(Dnp)-OSu
A-4295

Boc-Dap(Fmoc)-OH
A-3580

Boc-D-Dap(Fmoc)-OH
A-4235

Boc-Dap(Z)-OH
A-4675

Boc-Dap(Z)-OH · DCHA
A-3000

Boc-D-Dap(Z)-OH · DCHA
A-4265

H-Dap(Boc)-OMe · HCl
F-3420

H-D-Dap(Boc)-OMe · HCl
F-4065

Z-DAP DERIVATIVES

Z-Dap-OH
C-3315

Z-D-Dap-OH
C-3755

Z-Dap(Boc)-OH
C-3685

Z-D-Dap(Boc)-OH
C-3760

Z-Dap(Fmoc)-OH
C-4200

Z-D-Dap(Fmoc)-OH
C-4205

Z-Dap(Z)-OH
C-3695

FURTHER DAP DERIVATIVES

H-Dap-OH · HCl
F-3040

H-D-Dap-OH · HCl
F-3045

n-Butyloxycarbonyl-Dap-OH
F-3250

L-Albiziine
(H-Dap(carbamoyl)-OH)
F-3670

[2,6-Dimethyl-4-(3-[2-(Z-amino)-ethylcarbamoyl]-propoxy)-benzenesulfonyl]-Dap(Boc)-OMe
(DPC-AG1166-00 (L-Isomer))
C-4240

[2,6-Dimethyl-4-(3-[2-(Z-amino)-ethylcarbamoyl]-propoxy)-benzenesulfonyl]-D-Dap(Boc)-OMe
(DPC-AG1166-00 (D-Isomer))
C-4235

DECARBOXY- DAP

N-1-Fmoc-1,2-diaminoethane · HCl
Q-2410

N-1-Boc-1,2-diaminoethane · HCl
Q-2450

N-1-Z-1,2-diaminoethane · HCl
Q-2445

FMOC-DAB DERIVATIVES

Fmoc-Dab-OH
B-2300

Fmoc-D-Dab-OH
B-2365

Fmoc-Dab(Adpoc)-OH
B-2860

Fmoc-Dab(Aloc)-OH
B-2850

Fmoc-Dab(Boc)-OH
B-1800

Fmoc-D-Dab(Boc)-OH
B-2960

Fmoc-Dab(Fmoc)-OH
B-2270

Fmoc-Dab(ivDde)-OH
B-4065

Fmoc-Dab(Z)-OH
B-3250

Fmoc- γ -azido-Abu-OH
(Fmoc-Dab(N₂)-OH,
Fmoc-L- γ -azidohomoalanine)
B-4145

BOC-DAB DERIVATIVES

Boc-Dab-OH
A-3215

Boc-D-Dab-OH
A-4215

Boc-Dab-OtBu · HCl
A-4415

Boc-Dab(Aloc)-OH
A-4125

Boc-Dab(Boc)-OH · DCHA
A-3480

Boc-Dab(Fmoc)-OH
A-3520

Boc-D-Dab(Fmoc)-OH
A-4230

Boc-Dab(Z)-OH · DCHA
A-2905

Boc-D-Dab(Z)-OH · DCHA
A-4260

H-Dab(Boc)-OH
A-3305

H-D-Dab(Boc)-OH
F-4200

H-Dab(Boc)-OMe · HCl
E-3360

Z-DAB DERIVATIVES

Z-Dab-OH
C-3705

Z-D-Dab-OH
C-3770

Z-Dab(Boc)-OH · DCHA
C-3510

Z-D-Dab(Boc)-OH · DCHA
C-3765

Z-Dab(Z)-OH
C-3690

FURTHER DAB DERIVATIVES

H-Dab-OH
F-3050

H-D-Dab-OH
F-3055

Ac-Dab(Boc)-OH
F-1020

H-γ-azido-Abu-OH
(H-Dab(N₂)-OH,
L-γ-azidohomoalanine)
F-4265

DECARBOXY-DAB

N-1-Fmoc-1,3-diaminopropane · HCl
Q-2415

N-1-Boc-1,3-diaminopropane · HCl
Q-2590

N-1-Z-1,3-diaminopropane · HCl
Q-2555

FURTHER α,ω-DIAMINO ACIDS

For our offer of lysine and ornithine derivatives please see our online shop at shop.bachem.com

Fmoc-α-amino-DL-Gly(Boc)-OH
A-4320

Fmoc-α-amino-D-Gly(Boc)-OH
B-3585

2,6-Diaminopimelic acid
F-1505

Fmoc-Cys(3-(Boc-amino)-propyl)-OH
B-3120

DL-2-Acetamido-6-(Boc-amino)-4-hexynoic acid · DCHA
F-1010

Boc-Cys(Z-aminoethyl)-OH
(Boc-L-4-thialysine(Z)-OH)
A-3535

H-Cys(aminoethyl)-OH · HCl
(L-4-Thialysine · HCl)
E-1355

Marketing & Sales Contact

Europe, Africa, Middle East and Asia Pacific

Bachem AG

Tel. +41 58 595 2020
sales.ch@bachem.com

Americas

Bachem Americas, Inc.

Tel. +1 888 422 2436 (toll free in USA & Canada)
+1 310 539 4171
sales.us@bachem.com

Visit our website
www.bachem.com
or shop online
shop.bachem.com

All information is compiled to the best of our knowledge. We cannot be made liable for any possible errors or misprints. Some products may be restricted in certain countries.



www.bachem.com



shop.bachem.com