

# PRODUCT INFORMATION



## Dipeptide diaminobutyroyl benzylamide (acetate)

Item No. 27566

CAS Registry No.: 823202-99-9

Formal Name: (2S)-β-alanyl-L-prolyl-2,4-diamino-N-(phenylmethyl)-butanamide, diacetate

Synonyms: H-β-Ala-Pro-Dab-NH-benzyl,  
H-β-Ala-Pro-DabNHBz

MF: C<sub>19</sub>H<sub>29</sub>N<sub>5</sub>O<sub>3</sub> • 2C<sub>2</sub>H<sub>4</sub>O<sub>2</sub>

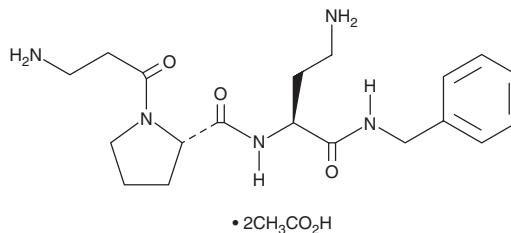
FW: 495.6

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Dipeptide diaminobutyroyl benzylamide (acetate) is supplied as a solid. A stock solution may be made by dissolving the dipeptide diaminobutyroyl benzylamide (acetate) in the solvent of choice, which should be purged with an inert gas. Dipeptide diaminobutyroyl benzylamide (acetate) is soluble in the organic solvent DMSO at a concentration of approximately 3 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of dipeptide diaminobutyroyl benzylamide (acetate) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of dipeptide diaminobutyroyl benzylamide (acetate) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Dipeptide diaminobutyroyl benzylamide is a biomimetic peptide and a muscarinic acetylcholine receptor antagonist.<sup>1</sup> It mimics the action of the temple viper (*T. wagleri*) venom peptide Waglerin-1 to block sodium uptake and induce muscle relaxation.

### Reference

1. Balaev, A.N., Okhmanovich, K.A., and Osipov, V.N. A shortened, protecting group free, synthesis of the anti-wrinkle venom analogue Syn-Ake® exploiting an optimized Hofmann-type rearrangement. *Tetrahedron Lett.* **55**(42), 5745-5747 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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