

Product Name: BzF

Catalog No.: 6786

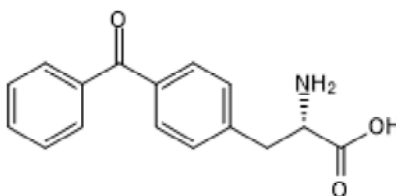
Batch No.: 1

CAS Number: 104504-45-2

IUPAC Name: 4-Benzoyl-L-phenylalanine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₁₅NO₃.1½H₂O
Batch Molecular Weight: 296.32
Physical Appearance: White solid
Solubility: 80% acetic acid to 50 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.7% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	64.85	6.12	4.73
Found	64.85	6.06	4.81

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Photoreactive unnatural amino acid. Acts as photo cross-linking probe when incorporated into proteins, including ion channels, transporters and GPCRs. When exposed to UV light it forms a covalent cross-link with a C-H bond-containing group, enabling selective and potent UV-driven photoinactivation of protein function. Has been used to study protein-protein and protein-ligand interactions.

Physical and Chemical Properties:

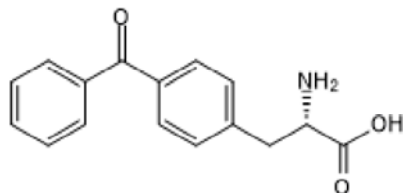
Batch Molecular Formula: C₁₆H₁₅NO₃·1½H₂O

Batch Molecular Weight: 296.32

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

80% acetic acid to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Klippenstein et al (2018) Probing ion channel structure and function using light-sensitive amino acids. *Trends Biochem.Sci.* **43** 436. PMID: 29650383.

Klippenstein et al (2014) Photoinactivation of glutamate receptors by genetically encoded unnatural amino acids. *J.Neurosci.* **34** 980. PMID: 24431456.

Ye et al (2008) Site-specific incorporation of keto amino acids into functional G protein-coupled receptors using unnatural amino acid mutagenesis. *J.Biol.Chem.* **283** 1525. PMID: 17993461.

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