

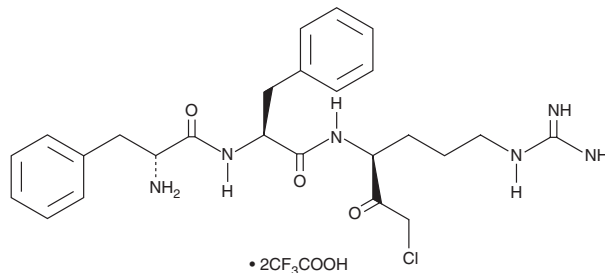
PRODUCT INFORMATION



PPACKII (trifluoroacetate salt)

Item No. 15360

CAS Registry No.: 649748-23-2
Formal Name: D-phenylalanyl-N-[(1S)-4-[(aminoiminomethyl)amino]-1-(chloroacetyl)butyl]-L-phenylalaninamide, bis(trifluoroacetate)
Synonym: H-D-Phe-Phe-Arg-Chloromethyl Ketone
MF: C₂₅H₃₃ClN₆O₃ • 2CF₃COOH
FW: 729.1
Purity: ≥95%
UV/Vis.: λ_{max}: 210 nm
Supplied as: A crystalline 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

PPACKII (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the PPACKII (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. PPACKII (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of PPACKII (trifluoroacetate salt) in these solvents is approximately 30 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 PPACKII (trifluoroacetate salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of PPACKII (trifluoroacetate salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Kallikreins are a class of serine proteases that affect the release of vasodepressor peptides or kinins from a plasma substrate. PPACKII is a specific and irreversible inhibitor of glandular and plasma kallikreins.¹ At micromolar concentrations it has been shown to prevent apolipoprotein proteolysis in dextran sulfate-precipitated human plasma LDL and to inhibit serum atrial natriuretic peptide cleavage.² PPACKII has also been reported to inactivate the amidolytic activity of native human Hageman Factor (Factor XII) at 5.3 μM.³

References

1. Kettner, C., and Shaw, E. Inactivation of trypsin-like enzymes with peptides of arginine chloromethyl ketone. *Methods Enzymol.* **80(Pt. C)**, 826-842 (1981).
2. Byrne, R.E., and Scanu, A.M. Apolipoprotein B-100 of plasma low density lipoproteins undergoes proteolysis by contact activation factors when plasma is treated with dextran sulfate-500-MgCl₂. *J. Lipid Res.* **30(1)**, 109-120 (1989).
3. Silverberg, M. and Kaplan, A.P. Enzymatic activities of activated and zymogen forms of human Hageman factor (factor XII). *Blood* **60(1)**, 64-70 (1982).

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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