

Calcineurin Autoinhibitory Peptide

Subcategory: Inhibitory Peptide, Synthetic Peptide

Cat. No.: 350004

Unit: 1 mg

Description:

This peptide is a specific inhibitor for calcineurin (PP2BA), a Ser/Thr protein phosphatase from the PPP family and PP2B subfamily. The peptide corresponds to the residues 467-491 within the inhibitory domain of human calcineurin alpha subunit. Calcineurin is known to dephosphorylate heat shock protein beta-1 (HSPB1) and protein phosphatase Slingshot homolog 1 (SSH1). This peptide inhibits Mn²⁺-stimulated calcineurin activity (IC₅₀ = 10 uM using 32P-myosin light chain as substrate) but has no effect on Ni²⁺-stimulated enzyme activity. It does not inhibit CaMKII kinase, protein phosphatase 1 or 2A.

Format: Each vial contains 1 mg of lyophilized solid packaged under an inert gas and supplied as a trifluoroacetate salt.

Alternate Names: Serine/Threonine-protein phosphatase 2B catalytic subunit alpha isoform; Calmodulin-dependent calcineurin A subunit alpha isoform; CAM-PRP catalytic subunit; PPP3CA; CALNA; CAN

Accession No.: Q08209

MW: 2930.4 g/mol

Sequence: Ile-Thr-Ser-Phe-Glu-Glu-Ala-Lys-Gly-Leu-Asp-Arg-Ile-Asn-Glu-Arg-Met-Pro-Pro-Arg-Arg-Asp-Ala-Met-Pro or ITSFEAKGLDRINERMPPRRDAMP

Composition: C₁₂₄H₂₀₅N₃₉O₃₉S₂

Purity: Purity > 95% by HPLC

Solubility: Distilled water for a solution up to 2 mg/ml, otherwise we recommend using acetonitrile.

Storage: Store at -20°C. The product is hygroscopic and must be protected from light. Product is guaranteed one year from the date of shipment. Following reconstitution, aliquot and store at -20°C.

For research use only, not for diagnostic or therapeutic procedures.