

Cat#	SP-101404-2
Description:	SH2 Domain Ligand (1) (AA: Ac-Asp-Tyr(PO ₃ H ₂)-Val-Pro-Met-Leu-NH ₂) (MW: 857.93)
Size:	2 mg
Purity:	>95%
Store:	Desiccated at -20oC.

The SH2 (Src Homology 2) domain is a structurally conserved protein domain contained within the Src oncoprotein and in many other intracellular signal-transducing proteins. SH2 domains allow proteins containing those domains to dock to phosphorylated tyrosine residues on other proteins. SH2 domains are commonly found in adapter proteins that aid in the signal transduction of receptor tyrosine kinase pathways.

SH2 domains typically bind a phosphorylated tyrosine residue in the context of a longer peptide motif within a target protein, and SH2 domains represent the largest class of known pTyr-recognition domains. Phosphorylation of tyrosine residues in a protein occurs during signal transduction and is carried out by tyrosine kinases. In this way, phosphorylation of a substrate by tyrosine kinases acts as a switch to trigger binding to an SH2 domain-containing protein. The intimate relationship between tyrosine kinases and SH2 domains is supported by their coordinate emergence during eukaryotic evolution.

SP-101404-2 peptide is able to bind to the SH2 domains in competition with protein ligands.

Refs: Ye, B. et al. J. Med. Chem. 38, 4270 (1995); Ruseel RB (1992) FEBC Let.. 304, 15-20; Pawson T (2001) Trends in Cell Biol. 11, 504-511; Huang H (2008) Molecular & Cellular Proteomics : MCP 7 (4): 768-84; Liu BA (2006) Mol Cell. 6, 851-868

Related Items

Catalog#	ProdDescription
SP-101397-1	SH2 Domain Ligand (3) (AA: Biotin-LC-Glu-Pro-Gln-pTyr-Glu-Glu-Ile-Pro-Ile-Tyr-Leu) (MW: 1813.03)
SP-101398-2	SH2 Domain Ligand (5) (AA: Biotin-LC-Tyr(PO ₃ H ₂)-Glu-Glu-Ile) (MW: 972.05)
SP-101402-2	SH2 Domain Ligand (2) (AA: Glu-Pro-Gln-pTyr-Glu-Glu-Ile-Pro-Ile-Tyr-Leu) (MW: 1473.57)
SP-101403-2	SH2 Domain Ligand (4) (AA: Ac-pTyr-Tyr-pTyr-Ile-Glu) (MW: 951.86)
SP-101404-2	SH2 Domain Ligand (1) (AA: Ac-Asp-Tyr(PO ₃ H ₂)-Val-Pro-Met-Leu-NH ₂) (MW: 857.93)
SP-89816-1	Grb2 SH2 Domain Ligand (AA: Tyr(PO ₃ H ₂)-Val-Asn-Val) (MW: 573.56)

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