

Phospho-SHP2(Y584) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3716a**Specification**

Phospho-SHP2(Y584) Antibody Blocking peptide - Product InformationPrimary Accession [Q06124](#)**Phospho-SHP2(Y584) Antibody Blocking peptide - Additional Information****Gene ID** 5781**Other Names**

Tyrosine-protein phosphatase non-receptor type 11, Protein-tyrosine phosphatase 1D, PTP-1D, Protein-tyrosine phosphatase 2C, PTP-2C, SH-PTP2, SHP-2, Shp2, SH-PTP3, PTPN11, PTP2C, SHPTP2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-SHP2(Y584) Antibody Blocking peptide - Protein Information**Name** PTPN11**Synonyms** PTP2C, SHPTP2**Function**

Acts downstream of various receptor and cytoplasmic protein tyrosine kinases to participate in the signal transduction from the cell surface to the nucleus (PubMed:10655584, PubMed:18559669, PubMed:18829466, PubMed:26742426, PubMed:28074573). Positively regulates MAPK signal transduction pathway (PubMed:28074573). Dephosphorylates GAB1, ARHGAP35 and EGFR (PubMed:28074573). Dephosphorylates ROCK2 at 'Tyr-722' resulting in stimulation of its RhoA binding activity (PubMed:18559669). Dephosphorylates CDC73 (PubMed:26742426). Dephosphorylates SOX9 on tyrosine residues, leading to

inactivate SOX9 and promote ossification (By similarity). Dephosphorylates tyrosine-phosphorylated NEDD9/CAS-L (PubMed:19275884).

Cellular Location

Cytoplasm. Nucleus

Tissue Location

Widely expressed, with highest levels in heart, brain, and skeletal muscle.

Phospho-SHP2(Y584) Antibody Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

Phospho-SHP2(Y584) Antibody Blocking peptide - Images**Phospho-SHP2(Y584) Antibody Blocking peptide - Background**

SHP2 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains two tandem Src homology-2 domains, which function as phospho-tyrosine binding domains and mediate the interaction of this PTP with its substrates. This PTP is widely expressed in most tissues and plays a regulatory role in various cell signaling events that are important for a diversity of cell functions, such as mitogenic activation, metabolic control, transcription regulation, and cell migration.

Phospho-SHP2(Y584) Antibody Blocking peptide - References

Carver, K.C., et al. J. Biol. Chem. 285(11):8003-8012(2010)Pierpont, E.I., et al. Am. J. Med. Genet. A 152A (3), 591-600 (2010) Rani, D.S., et al. Mitochondrion 10(2):166-173(2010)Bakken, T., et al. Virology 397(2):379-388(2010)