

Phospho-mouse TSC2(S1412) Blocking Peptide
Synthetic peptide
Catalog # BP3826a**Specification****Phospho-mouse TSC2(S1412) Blocking Peptide - Product Information**Primary Accession [Q61037](#)**Phospho-mouse TSC2(S1412) Blocking Peptide - Additional Information****Other Names**

Tuberin, Tuberous sclerosis 2 protein homolog, Tsc2

Target/Specificity

The synthetic peptide sequence is selected from aa 1405-1419 of MOUSE Tsc2

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-mouse TSC2(S1412) Blocking Peptide - Protein Information**Name Tsc2****Function**

In complex with TSC1, this tumor suppressor inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling (By similarity). Acts as a GTPase-activating protein (GAP) for the small GTPase RHEB, a direct activator of the protein kinase activity of

Phospho-mouse TSC2(S1412) Blocking Peptide - Background

In complex with TSC1, inhibits the nutrient-mediated or growth factor-stimulated phosphorylation of S6K1 and EIF4EBP1 by negatively regulating mTORC1 signaling. Acts as a GTPase-activating protein (GAP) for the small GTPase RHEB, a direct activator of the protein kinase activity of mTORC1. Implicated as a tumor suppressor. Involved in microtubule-mediated protein transport, but this seems to be due to unregulated mTOR signaling (By similarity). Specifically stimulates the intrinsic GTPase activity of the Ras-related protein RAP1A and RAB5. Suggesting a possible mechanism for its role in regulating cellular growth (By similarity).

mTORC1 (By similarity). May also play a role in microtubule-mediated protein transport (PubMed:16707451). Also stimulates the intrinsic GTPase activity of the Ras-related proteins RAP1A and RAB5 (By similarity).

Cellular Location

Cytoplasm. Membrane; Peripheral membrane protein. Note=At steady state found in association with membranes.

Tissue Location

Widely expressed.

Phospho-mouse TSC2(S1412) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)