

Phospho-mouse TSC2(S1421) Blocking Peptide

Synthetic peptide

Catalog # BP3828a

Specification**Phospho-mouse TSC2(S1421) Blocking Peptide -
Product Information**Primary Accession [Q61037](#)Other Accession [P49816](#)**Phospho-mouse TSC2(S1421) Blocking Peptide -
Additional Information****Other Names**Tuberin, Tuberous sclerosis 2 protein
homolog, Tsc2**Target/Specificity**The synthetic peptide sequence is selected
from aa 1414-1427 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(S1421) 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**Phospho-mouse TSC2(S1421) 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).

activator of the protein kinase activity of 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(S1421) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)