

SMO Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP16325c**Specification**

SMO Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q99835](#)**SMO Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 6608**Other Names**

Smoothed homolog, SMO, Protein Gx, SMO, SMOH

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.

SMO Antibody (Center) Blocking Peptide - Protein Information**Name** SMO**Synonyms** SMOH**Function**

G protein-coupled receptor which associates with the patched protein (PTCH) to transduce hedgehog protein signaling. Binding of sonic hedgehog (SHH) to its receptor patched prevents inhibition of smoothed (SMO) by patched. When active, SMO binds to and sequesters protein kinase A catalytic subunit PRKACA at the cell membrane, preventing PRKACA-mediated phosphorylation of GLI transcription factors which releases the GLI proteins from PRKACA-mediated inhibition and allows for transcriptional activation of hedgehog pathway target genes (By similarity). Required for the accumulation of KIF7, GLI2 and GLI3 in the cilia (PubMed:19592253). Interacts with DLG5 at the ciliary base to induce the accumulation of KIF7 and GLI2 at the ciliary tip for GLI2 activation (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P56726}; Multi-pass membrane protein. Cell projection, cilium. Note=Cilium localization is promoted by SHH and is required for activity. {ECO:0000250|UniProtKB:P56726}

SMO Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SMO Antibody (Center) Blocking Peptide - Images**SMO Antibody (Center) Blocking Peptide - Background**

The protein encoded by this gene is a G protein-coupled receptor that interacts with the patched protein, a receptor for hedgehog proteins. The encoded protein transduces signals to other proteins after activation by a hedgehog protein/patched protein complex.

SMO Antibody (Center) Blocking Peptide - References

Zhang, L., et al. Oral Dis 16(8):818-822(2010) Desch, P., et al. Oncogene 29(35):4885-4895(2010) Walter, K., et al. Clin. Cancer Res. 16(6):1781-1789(2010) Hirotsu, M., et al. Mol. Cancer 9, 5 (2010) :Rittie, L., et al. Aging Cell 8(6):738-751(2009)