

SMO Antibody (Center)

Rabbit Polyclonal Antibody Catalog # ABV11768

Specification

SMO Antibody (Center) - Product Information

Application	WB
Primary Accession	<u>Q99835</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	86397

SMO Antibody (Center) - Additional Information

Gene ID 6608

Positive ControlWestern blotApplication & UsageWB: 1:1000Alias SymbolSMOOther NamesSMOSMO Antibody (Center) polyclonal antibody, SMO antibody, Smoothened homolog antibody, SMOantibody, SMO polyclonal antibody, SMOH antibody

Appearance Colourless liquid

Formulation 100 μ g (0.5 mg/ml) of antibody in PBS with 0.09% (W/V) sodium azide.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions SMO Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SMO Antibody (Center) - 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 smoothened (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

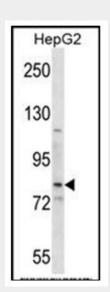
Cell membrane {ECO:0000250|UniProtKB:P56726}; Multi-pass membrane protein. Cell projection, cilium. Note=Cilium localization is promoted by SHH and is required for activity. {ECO:0000250|UniProtKB:P56726}

SMO Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SMO Antibody (Center) - Images



Western blot analysis in HepG2 cell line Lysates using SMO purified antibody.

SMO Antibody (Center) - 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 tranduces signals to other proteins



after activation by a hedgehog protein/patched protein complex.