abcepta

Anti-SMO / Smoothened Antibody (N-Terminus)
Rabbit Anti Human Polyclonal Antibody
Catalog # ALS17416

Specification

Anti-SMO / Smoothened Antibody (N-Terminus) - Product Information

Application	**WB, IHC-P**
Primary Accession	Q99835
Predicted	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**86397**

Anti-SMO / Smoothened Antibody (N-Terminus) - Additional Information

Gene ID 6608

Alias Symbol	**SMO**

Other Names
SMO, Frizzled family member 11, FZD11, Gx, Protein Gx, SMOH, Smoothened, Smoothened homolog

Target/Specificity
Recognizes endogenous levels of Smoothened protein.

Reconstitution & Storage
PBS, pH 7.3, 0.01% sodium azide, 30% glycerol. Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions
Anti-SMO / Smoothened Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-SMO / Smoothened Antibody (N-Terminus) - 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}

Anti-SMO / Smoothened Antibody (N-Terminus) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytomety](#)
- [Cell Culture](#)

Anti-SMO / Smoothened Antibody (N-Terminus) - Images