

# SMO Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP50630

## Product Information

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Application	WB
Primary Accession	<a href="#">Q99835</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	86397

## Additional Information

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Gene ID	6608
Other Names	Smoothened homolog, SMO, Protein Gx, SMO, SMOH
Dilution	WB~~ 1:500
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20°C

## Protein Information

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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: <a href="#">19592253</a> ). 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}

## Background

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G protein-coupled receptor that probably associates with the patched protein (PTCH) to transduce the hedgehog's proteins signal. Binding of sonic hedgehog (SHH) to its receptor patched is thought to prevent normal inhibition by patched of smoothened (SMO). Required for the accumulation of KIF7 and GLI3 in the cilia.

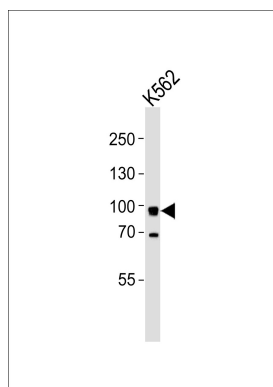
## References

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Xie J.,et al.Nature 391:90-92(1998).  
Jiang N.,et al.Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.  
Endoh-Yamagami S.,et al.Curr. Biol. 19:1320-1326(2009).  
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## Images

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Western blot analysis of lysate from K562 cell line,using SMO Antibody(AP50630). AP50630 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.

## Citations

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- [Novel-smoothened inhibitors for therapeutic targeting of naive and drug-resistant hedgehog pathway-driven cancers.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.