

Product datasheet for **TA500040BM**

Sonic Hedgehog (SHH) Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI3A2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI3A2
Applications:	IF, WB
Recommended Dilution:	WB: 1:2000, IF (1:100)
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Recombinant protein expressed in E.coli corresponding to amino acids 24-197 of human SHH
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol.
Concentration:	0.5 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	HRP
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	27.6 kDa (Actual 22 kDa/55 kDa)
Gene Name:	sonic hedgehog signaling molecule
Database Link:	NP_000184 Entrez Gene 20423 Mouse Entrez Gene 29499 Rat Entrez Gene 6469 Human Q15465



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Background:

SHH is instrumental in patterning the early embryo. It has been implicated as the key inductive signal in patterning of the ventral neural tube, the anterior-posterior limb axis, and the ventral somites. Of three human proteins showing sequence and functional similarity to the sonic hedgehog protein of *Drosophila*, this protein is the most similar. The protein is made as a precursor that is autocatalytically cleaved; the N-terminal portion is soluble and contains the signalling activity while the C-terminal portion is involved in precursor processing. More importantly, the C-terminal product covalently attaches a cholesterol moiety to the N-terminal product, restricting the N-terminal product to the cell surface and preventing it from freely diffusing throughout the developing embryo.

Synonyms:

HHG1; HLP3; HPE3; MCOPCB5; SMMCI; TPT; TPTPS

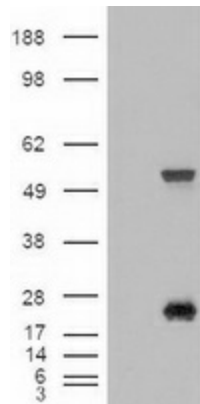
Protein Families:

Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein, Transmembrane

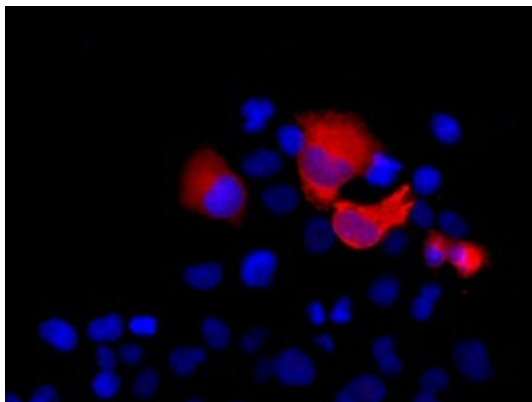
Protein Pathways:

Basal cell carcinoma, Hedgehog signaling pathway, Pathways in cancer

Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY SHH ([RC222175], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SHH. Positive lysates [LY424868] (100ug) and [LC424868] (20ug) can be purchased separately from OriGene.



Anti-SHH mouse monoclonal antibody ([TA500040]) immunofluorescent staining (Red) of COS7 cells transiently transfected by pCMV6-ENTRY SHH ([RC222175]).