

#### OriGene Technologies, Inc.

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# **Product datasheet for TA500040**

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

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3A2
Applications: IF, WB

Recommend Dilution: WB: 1:2000, IF (1:100)

Reactivity: Human
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 and 0.02% sodium azide.

**Concentration:** 0.12 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 27.6 kDa (Actual 22 kDa/55 kDa)

Gene Name: sonic hedgehog signaling molecule

Database Link: NP 000184 Entrez Gene 6469 Human

**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 product covalently attaches a cholesterol

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

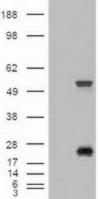
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein, Transmembrane

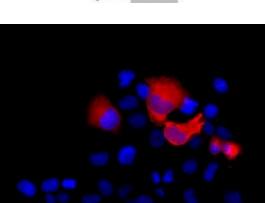
Protein Pathways: Basal cell carcinoma, Hedgehog signaling pathway, Pathways in cancer





### **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]).