

## Product datasheet for **TA500041**

### Sonic Hedgehog (SHH) Mouse Monoclonal Antibody [Clone ID: OTI10H6]

#### Product data:

|                         |  |
|-------------------------|--|
| Product Type:           | Primary Antibodies   |
| Clone Name:             | OTI10H6  |
| Applications:           | IF, WB   |
| Recommended Dilution:   | WB 1:1000~2000, IF 1:100   |
| Reactivity:             | Human, Dog, Rat, Monkey, Mouse   |
| Host:                   | Mouse  |
| Isotype:                | IgG1   |
| Clonality:              | Monoclonal   |
| Immunogen:              | Human recombinant protein fragment corresponding to amino acids 24-197 of human SHH (NP_000184) produced in E.coli.  |
| Formulation:            | PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.   |
| Concentration:          | 1 mg/ml  |
| Purification:           | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)  |
| Conjugation:            | Unconjugated   |
| Storage:                | Store at -20°C as received.  |
| Stability:              | Stable for 12 months from date of receipt.   |
| Predicted Protein Size: | 27.6 kDa   |
| Gene Name:              | sonic hedgehog signaling molecule  |
| Database Link:          | <a href="#">NP_000184</a><br><a href="#">Entrez Gene 20423 Mouse</a> <a href="#">Entrez Gene 29499 Rat</a> <a href="#">Entrez Gene 608860 Dog</a> <a href="#">Entrez Gene 716553 Monkey</a> <a href="#">Entrez Gene 6469 Human</a><br><a href="#">Q15465</a> |



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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:**

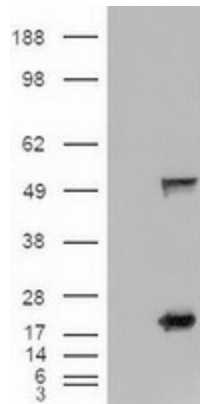
HHG1; HLP3; HPE3; MCOPCB5; SMMCI; TPT; TPTPS

**Protein Families:**

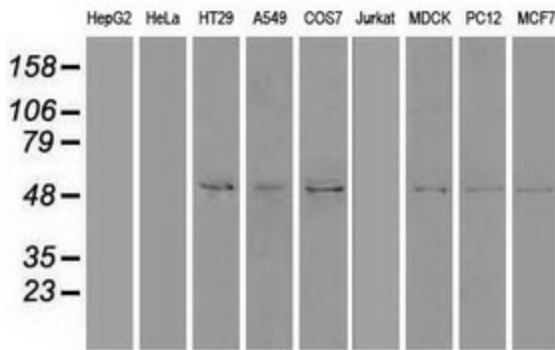
Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein, Transmembrane

**Protein Pathways:**

Basal cell carcinoma, Hedgehog signaling pathway, Pathways in cancer

**Product images:**


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SHH (Cat# [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 (Cat# TA500041). Positive lysates [LY424868] (100ug) and [LC424868] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-SHH monoclonal antibody.

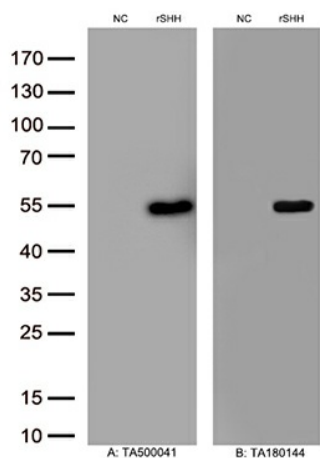
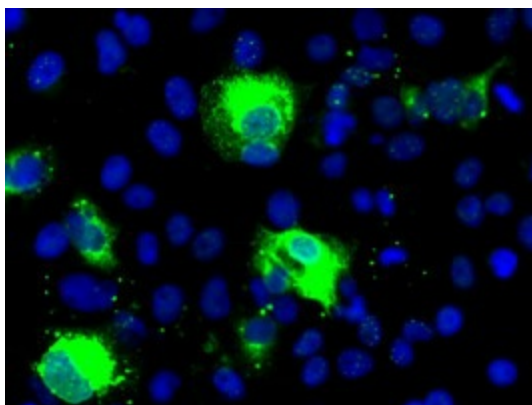


Figure A, Western blot analysis of overexpressed lysates(15ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], NC) , rat SHH plasmid ([RR208777], rSHH) using anti-SHH antibody TA500041(1:500). Figure B, Western blot analysis of the same samples as figure A with anti-DDK antibody ([TA180144], 1:1000)



Anti-SHH mouse monoclonal antibody (TA500041) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY SHH ([RC222175]).