

## Product datasheet for **TA336926**

### Sonic Hedgehog (SHH) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	Western Blot: 1-2 ug/ml, Immunohistochemistry-Paraffin: 1:200 - 1:400, Immunohistochemistry: 1:200 - 1:400, Immunocytochemistry/ Immunofluorescence: 1:200
Reactivity:	Human, Mouse, Rat, Primate
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	A synthetic peptide made to an N-terminal portion of the human SHH protein (between residues 1-75) [UniProt Q15465]
Formulation:	PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	sonic hedgehog
Database Link:	<a href="#">NP_000184</a> <a href="#">Entrez Gene 20423 Mouse</a> <a href="#">Entrez Gene 29499 Rat</a> <a href="#">Entrez Gene 6469 Human</a> <a href="#">Q15465</a>



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**Background:**

Sonic Hedgehog (SHH), also known as HLP3, HPE3, MCOPCB5, SMMCI, and HHG1, is a gene that encodes for a protein instrumental in patterning the early embryo. Specifically, SHH has been implicated as the main signal in mapping out the development of the ventral neural tube, the anterior-posterior limb axis, and the ventral somites. This occurs by SHH binding to the patched (PTC) receptor, which functions in association with smoothed (SMO), to activate the transcription of target genes. In the absence of SHH, PTC represses the constitutive signaling activity of SMO. SHH also regulates another target gene, the gli oncogene. In adults, SHH helps to control stem cell proliferation. The N-terminal form of SHH is associated with lipid rafts at the cell surface, while on a tissue level SHH is expressed in fetal intestine, liver, lung and kidney. Recent research has found SHH to modulate the spatial organization of neuroepithelial cell proliferation in the embryonic chick (PMID: 23031710), as well as detected a role for SHH in Idiopathic Pulmonary Fibrosis (PMID: 23023967).

**Synonyms:**

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

**Note:**

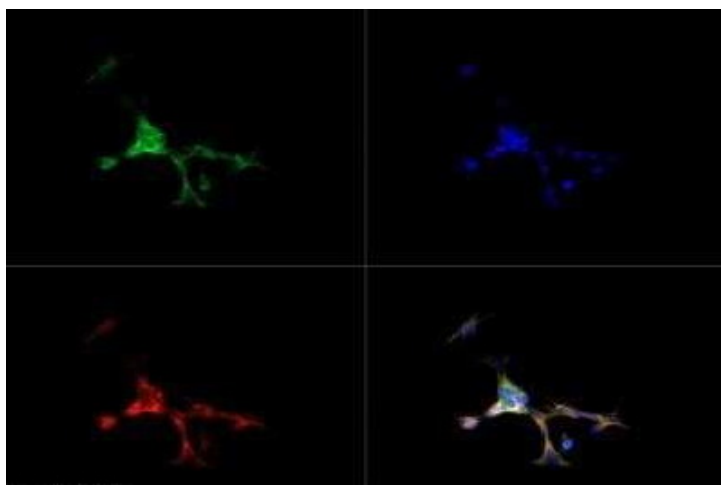
This SHH antibody is useful for Western blot, Immunocytochemistry/Immunofluorescence, and Immunohistochemistry on paraffin embedded sections. In Western blot a band is observed at ~50 kDa. In Immunocytochemistry/Immunofluorescence cytoplasm/membrane staining was observed in SH-SY5Y cells. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.

**Protein Families:**

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

**Protein Pathways:**

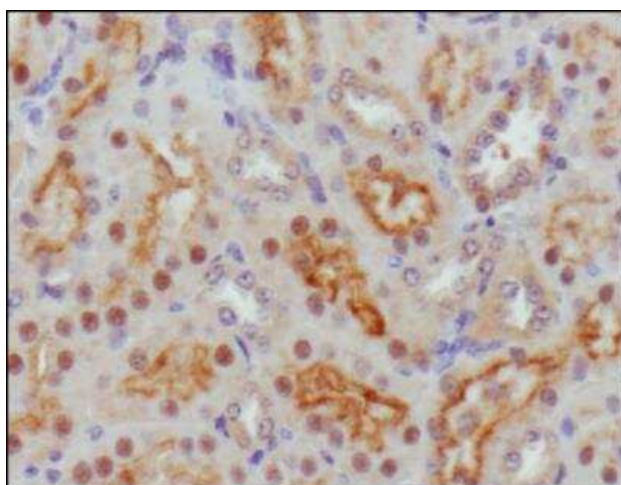
Basal cell carcinoma, Hedgehog signaling pathway, Pathways in cancer

**Product images:**

Immunocytochemistry/Immunofluorescence:  
Sonic Hedgehog Antibody TA336926 - Sonic Hedgehog antibody was tested in SH-SY5Y cells with FITC (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).



Western Blot: Sonic Hedgehog Antibody TA336926 - WB detection of Sonic Hedgehog in A. human stomach, B. human fetal liver membrane, C. PC12 and D. Cos7



Immunohistochemistry: Sonic Hedgehog Antibody TA336926 - IHC analysis of Sonic Hedgehog in mouse kidney.