Best Tools for immunology Research

Shh Monoclonal Antibody

Catalog No :	YM0577
Reactivity :	Human
Applications :	WB;ELISA
Target :	Shh
Fields :	>>Hedgehog signaling pathway;>>Axon guidance;>>Pathways in cancer;>>Proteoglycans in cancer;>>Basal cell carcinoma;>>Gastric cancer
Gene Name :	SHH
Protein Name :	Sonic hedgehog protein
Human Gene Id :	6469
Human Swiss Prot No :	Q15465
Mouse Swiss Prot No :	Q62226
Immunogen :	Purified recombinant fragment of human Shh expressed in E. Coli.
Specificity :	Shh Monoclonal Antibody detects endogenous levels of Shh protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	50kD

Cell Pathway : Hedgehog;Pathways in cancer;Basal cell carcinoma;

P References :

1. Cancer Lett. 2010 Jan 1;287(1):44-53.
2. Oncogene. 2009 Oct 8;28(40):3513-25.
3. J Biol Chem. 2009 Nov 20;284(47):32562-71.

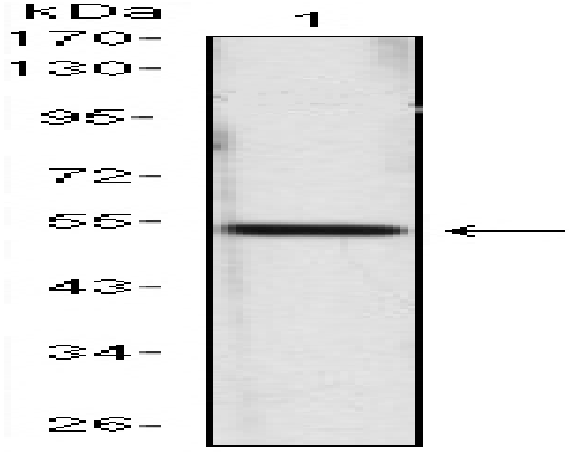
Background : This gene encodes a protein that is instrumental in patterning the early embryo. It has been implicated as the key inductive signal in patterning of the ventral neural tube, the anterior-posterior limb axis, and the ventral somites. Of three human proteins showing sequence and functional 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. Defects in this protein or in its signalling pathway are a cause of holoprosencephaly (HPE), a d

Function : disease:Defects in SHH are a cause of solitary median maxillary central incisor (SMMCI) [MIM:147250]. SMMCI is a rare dental anomaly characterized by the congenital absence of one maxillary central incisor.,disease:Defects in SHH are the cause of holoprosencephaly type 3 (HPE3) [MIM:142945]. Holoprosencephaly (HPE) [MIM:236100] is the most common structural anomaly of the brain, in which the developing forebrain fails to correctly separate into right and left hemispheres. Holoprosencephaly is genetically heterogeneous and associated with several distinct facies and phenotypic variability. The majority of HPE3 cases are apparently sporadic, although clear exemples of autosomal dominant inheritance have been described. Interestingly, up to 30% of obligate carriers of HPE3 gene in autosomal dominant pedigrees are clinically unaffected.,disease:Defects in SHH are the cause of microphthalmia

Subcellular Location : Endoplasmic reticulum membrane . Golgi apparatus membrane . Co-localizes with HHAT in the ER and Golgi membrane. .; [Sonic hedgehog protein N-product]: Cell membrane ; Lipid-anchor . The dual-lipidated sonic hedgehog protein N-product (ShhNp) is firmly tethered to the cell membrane where it forms multimers (PubMed:24522195). Further solubilization and release from the cell surface seem to be achieved through different mechanisms, including the interaction with DISP1 and SCUBE2, movement by lipoprotein particles, transport by cellular extensions called cytonemes or by the proteolytic removal of both terminal lipidated peptides (PubMed:26875496, PubMed:24522195). .

Expression : Fetal lung,Plasma,

Products Images



Western Blot analysis using Shh Monoclonal Antibody against SHH-hIgGFc transfected HEK293 cell lysate.