

Datasheet for ABIN1846141

anti-Sonic Hedgehog antibody (AA 26-161)





Overview

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Quantity:	100 μL
Target:	Sonic Hedgehog (SHH)
Binding Specificity:	AA 26-161
Reactivity:	Human, Mouse, Monkey
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Sonic Hedgehog antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Flow Cytometry (FACS)
Product Details	
Immunogen:	Purified recombinant fragment of human SHH (AA: 26-161) expressed in E. coli.
Isotype:	lgG1
Purification:	Purified antibody
Target Details	
Target:	Sonic Hedgehog (SHH)
Alternative Name:	SHH (SHH Products)
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

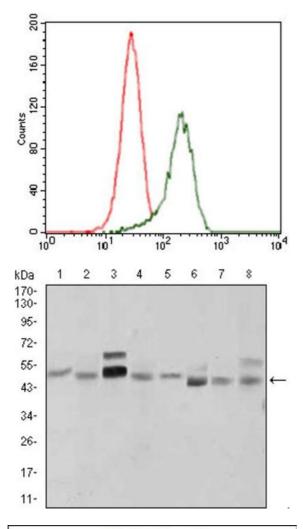
similar. The protein is made as a precursor that is autocatalytically cleaved, the N-terminal portion is soluble and contains the signalling activity while the C-terminal portion is involved in precursor processing. More importantly, the C-terminal product covalently attaches a cholesterol moiety to 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 disorder in which the developing forebrain fails to correctly separate into right and left hemispheres. HPE is manifested by facial deformities. It is also thought that mutations in this gene or in its signalling pathway may be responsible for VACTERL syndrome, which is characterized by vertebral defects, anal atresia, tracheoesophageal fistula with esophageal atresia, radial and renal dysplasia, cardiac anomalies, and limb abnormalities. Additionally, mutations in a long range enhancer located approximately 1 megabase upstream of this gene disrupt limb patterning and can result in preaxial polydactyly.

Molecular Weight:	49.6 kDa
Gene ID:	6469, 20423, 716553
Pathways:	Hedgehog Signaling, Dopaminergic Neurogenesis, Regulation of Muscle Cell Differentiation,

Tube Formation, Skeletal Muscle Fiber Development

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	PBS with 0.05 % sodium azide and 0.5 % protein stabilizer.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Aliquot and store at -20 °C. Avoid repeated freeze/thaw cycles.

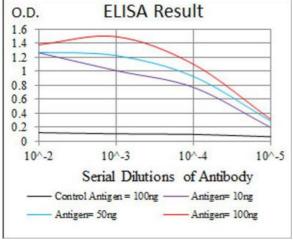


Flow Cytometry

Image 1.

Western Blotting

Image 2. Western blot analysis using SHH antibody against LNCaP (1), HepG2 (2), PANC-1 (3), HeLa (4), SK-N-SH (5), F9 (6), NIH3T3 (7), and COS7 (8) cell lysate.



ELISA

Image 3. Red: Control Antigen (100ng); Purple: Antigen (10ng); Green: Antigen (50ng); Blue: Antigen (100ng).

Please check the product details page for more images. Overall 7 images are available for ABIN1846141.