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Datasheet for ABIN2781775

anti-Sonic Hedgehog antibody (N-Term)

7 Images

Overview

Quantity:	100 µL
Target:	Sonic Hedgehog (SHH)
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat, Zebrafish (Danio rerio), Cow, Dog, Horse, Guinea Pig, Goat, Rabbit
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Sonic Hedgehog antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N terminal region of human SHH
Sequence:	RCLLLVLVSS LLVCSGLACG PGRGFGKRRH PKKLTPLAYK QFIPNVAEKT
Predicted Reactivity:	Cow: 93%, Dog: 100%, Goat: 93%, Guinea Pig: 100%, Horse: 100%, Human: 100%, Mouse: 100%, Rabbit: 100%, Rat: 100%, Zebrafish: 100%
Characteristics:	This is a rabbit polyclonal antibody against SHH. It was validated on Western Blot and immunohistochemistry.
Purification:	Affinity Purified

Target Details

Target:	Sonic Hedgehog (SHH)
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Target Details

Alternative Name: [SHH \(SHH Products\)](#)

Background: SHH is 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. Defects in this protein or in its signalling pathway are a cause of holoprosencephaly (HPE). It is also thought that mutations in its 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. This gene, which is expressed only during embryogenesis, 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. In addition, it is 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.

Alias Symbols: HHG1, HLP3, HPE3, SMMCI, TPT, TPTPS, MCOPCB5

Protein Interaction Partner: UBC, SEL1L, DERL2, DERL1, SYVN1, HHIP, PTCH2, PTCH1, SHH, ADCYAP1, GAS1,

Protein Size: 462

Molecular Weight: 28 kDa

Gene ID: 6469

NCBI Accession: [NM_000193](#), [NP_000184](#)

UniProt: [Q15465](#)

Pathways: [Hedgehog Signaling](#), [Dopaminergic Neurogenesis](#), [Regulation of Muscle Cell Differentiation](#), [Tube Formation](#), [Skeletal Muscle Fiber Development](#)

Application Details

Application Notes: Optimal working dilutions should be determined experimentally by the investigator.

Comment: Antigen size: 462 AA

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: Lot specific

Buffer: Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.

Preservative: Sodium azide

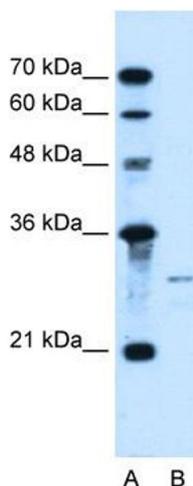
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -20 °C

Storage Comment: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

Images



Western Blotting

Image 1. WB Suggested Anti-SHH Antibody Titration: 0.2-1 ug/ml Positive Control: HepG2 cell lysate

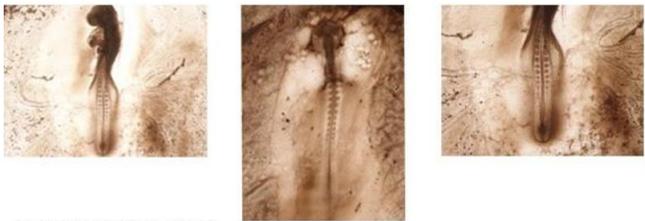


SSH (ARP44235_P050)
Immunohistochemistry
Sample: Chicken Embryos
Dilution:
Primary: 1 to 1000
Secondary: 1 to 500
Application Data in Forum

Submitted by:
Tamara Franz-Odendaal
Mount Saint Vincent University

Immunohistochemistry

Image 2. Sample Type: Chicken Embryos Dilution: 1:1000



Immunohistochemistry

Image 3. Chicken embryos Primary antibody: 1:1000 (ARP44235_p050) anti -shh Secondary Antibody: 1:500 (ASP00001) goat anti-rabbit HRP conjugated

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN2781775.