

Product datasheet

Anti-Sonic Hedgehog antibody ab19897

★★★★☆ 7 Abreviews 7 References 画像数 2

製品の概要

製品名	Anti-Sonic Hedgehog antibody
製品の詳細	Rabbit polyclonal to Sonic Hedgehog
由来種	Rabbit
アプリケーション	適用あり: ICC/IF, Sandwich ELISA, WB 適用なし: IHC-Fr
種交差性	交差種: Mouse 交差が予測される動物種: Rat, Chicken, Cow, Human, Xenopus laevis, Zebrafish, a wide range of other species 
免疫原	Synthetic peptide conjugated to KLH derived from within residues 1 - 100 of Human Sonic Hedgehog. Immunogen の所有権に関して (Peptide available as ab21448 .)
ポジティブ・コントロール	This antibody gave a positive signal in Mouse Recombinant Sonic Hedgehog protein.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab19897** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
ICC/IF		Use a concentration of 5 µg/ml.
Sandwich ELISA		Use a concentration of 0.5 µg/ml. For sandwich ELISA, use this antibody as Detection at 0.5 µg/ml with Mouse monoclonal [10H6] to Sonic Hedgehog (ab87382) as Capture.
WB	★★★★☆	Use a concentration of 1 µg/ml. Detects a band of approximately 26 kDa (predicted molecular weight: 48 kDa).
追加情報		Is unsuitable for IHC-Fr.
ターゲット情報		
機能		<p>Binds to the patched (PTC) receptor, which functions in association with smoothened (SMO), to activate the transcription of target genes. In the absence of SHH, PTC represses the constitutive signaling activity of SMO. Also regulates another target, the gli oncogene. Intercellular signal essential for a variety of patterning events during development: signal produced by the notochord that induces ventral cell fate in the neural tube and somites, and the polarizing signal for patterning of the anterior-posterior axis of the developing limb bud. Displays both floor plate- and motor neuron-inducing activity. The threshold concentration of N-product required for motor neuron induction is 5-fold lower than that required for floor plate induction.</p>
組織特異性		Expressed in fetal intestine, liver, lung, and kidney. Not expressed in adult tissues.
関連疾患		<p>Defects in SHH are the cause of microphthalmia isolated with coloboma type 5 (MCOPCB5) [MIM:611638]. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues. Ocular abnormalities like opacities of the cornea and lens, scarring of the retina and choroid, cataract and other abnormalities like cataract may also be present. Ocular colobomas are a set of malformations resulting from abnormal morphogenesis of the optic cup and stalk, and the fusion of the fetal fissure (optic fissure).</p> <p>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 examples of autosomal dominant inheritance have been described. Interestingly, up to 30% of obligate carriers of HPE3 gene in autosomal dominant pedigrees are clinically unaffected.</p> <p>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.</p> <p>Defects in SHH are the cause of triphalangeal thumb-polysyndactyly syndrome (TPTPS) [MIM:174500]. TPTPS is an autosomal dominant syndrome characterized by a wide spectrum of pre- and post-axial abnormalities due to altered SHH expression pattern during limb development. TPTPS mutations have been mapped to the 7q36 locus in the LMBR1 gene which contains in its intron 5 a long-range cis-regulatory element of SHH expression.</p>
配列類似性		Belongs to the hedgehog family.
翻訳後修飾		<p>The C-terminal domain displays an autoproteolysis activity and a cholesterol transferase activity. Both activities result in the cleavage of the full-length protein and covalent attachment of a cholesterol moiety to the C-terminal of the newly generated N-terminal fragment (N-product). The</p>

N-product is the active species in both local and long-range signaling, whereas the C-product has no signaling activity.

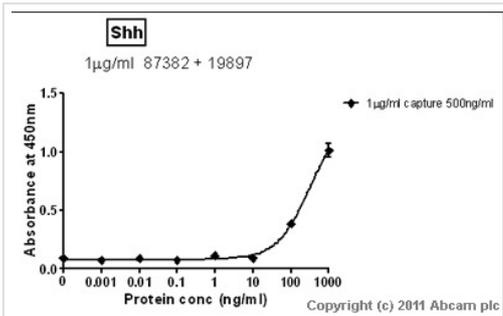
Cholesterylation is required for N-product targeting to lipid rafts and multimerization.

N-palmitoylation of Cys-24 by HHAT is required for N-product multimerization and full activity.

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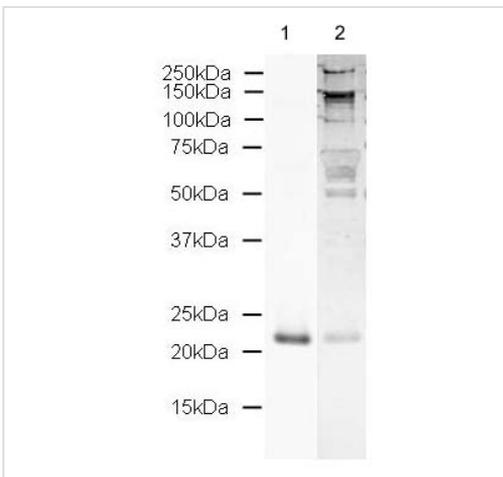
Cell membrane. The N-product either remains associated with lipid rafts at the cell surface, or forms freely diffusible active multimers with its hydrophobic lipid-modified N- and C-termini buried inside and Secreted > extracellular space. The C-terminal peptide diffuses from the cell.

画像



Sandwich ELISA - Anti-Sonic Hedgehog antibody (ab19897)

Standard Curve for Sonic Hedgehog (Analyte: [Sonic Hedgehog protein \(Amino end active\) \(ab63216\)](#)); dilution range 1pg/ml to 1µg/ml using Capture Antibody [Mouse monoclonal \[10H6\] to Sonic Hedgehog \(ab87382\)](#) at 1µg/ml and Detector Antibody [Rabbit polyclonal to Sonic Hedgehog \(ab19897\)](#) at 0.5µg/ml.



Western blot - Anti-Sonic Hedgehog antibody (ab19897)

All lanes : Anti-Sonic Hedgehog antibody (ab19897) at 1 µg/ml

Lane 1 : 22 kDa fragment of Mouse recombinant Sonic Hedgehog protein

Lane 2 : 22 kDa fragment of Mouse recombinant Sonic Hedgehog protein with Human Sonic Hedgehog peptide ([ab21448](#)) at 1 µg/ml

Lysates/proteins at 1 µg per lane.

Predicted band size: 48 kDa

Observed band size: 22 kDa

ab19897 detects a 180 AA (22 kDa) recombinant fragment of mouse Sonic Hedgehog (lane 1). Binding of ab19897 to Sonic Hedgehog was reduced when blocking using the immunising peptide (lane 2).

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