abcam

Product datasheet

Anti-Ihh antibody [EP1192Y] ab52919

Recombinant RabMAb

★★★★★ 1 Abreviews 30 References 7 Images

Overview

Product name	Anti-Ihh antibody [EP1192Y]
Description	Rabbit monoclonal [EP1192Y] to Ihh
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat, NIH/3T3, C6, His-tagged (IHH) recombinant protein (aa1-411), Human cerebellum lysate. IHC-P: Human liver, Mouse cerebrum, Rat cerebrum.
General notes	 This product is a recombinant monoclonal antibody, which offers several advantages including: High batch-to-batch consistency and reproducibility Improved sensitivity and specificity Long-term security of supply Animal-free production For more information <u>see here</u>. Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb[®] patents</u>.

Properties	
Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1192Y
lsotype	lgG

Applications

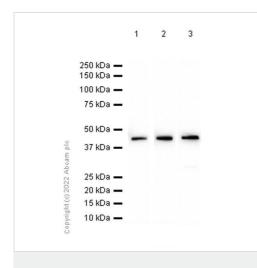
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab52919 in the following tested applications.

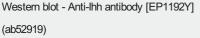
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/5000 - 1/10000. Predicted molecular weight: 45 kDa.
IHC-P		1/200 - 1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols .

Target		
Function	Intercellular signal essential for a variety of patterning events during development. Binds to the patched (PTC) receptor, which functions in association with smoothened (SMO), to activate the transcription of target genes. Implicated in endochondral ossification: may regulate the balance between growth and ossification of the developing bones. Induces the expression of parathyroid hormone-related protein (PTHRP).	
Tissue specificity	Expressed in embryonic lung, and in adult kidney and liver.	
Involvement in disease	Defects in IHH are the cause of brachydactyly type A1 (BDA1) [MIM:112500]. BDA1 is an autosomal dominant disorder characterized by middle phalanges of all the digits rudimentary or fused with the terminal phalanges. The proximal phalanges of the thumbs and big toes are short. Defects in IHH are a cause of acrocapitofemoral dysplasia (ACFD) [MIM:607778]. ACFD is a disorder characterized by short stature of variable severity with postnatal onset. The most constant radiographic abnormalities are observed in the tubular bones of the hands and in the proximal part of the femur. Cone-shaped epiphyses or a similar epiphyseal configuration with premature epimetaphyseal fusion result in shortening of the skeletal components involved. Cone-shaped epiphyses were also present to a variable extent at the shoulders, knees, and ankles.	
Sequence similarities	Belongs to the hedgehog family.	
Post-translational modifications	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 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. Palmitoylated. N-palmitoylation is required for N-product multimerization and full activity.	
Cellular localization	Secreted > extracellular space. The C-terminal peptide diffuses from the cell and Cell membrane The N-terminal peptide remains associated with the cell surface.	

Images





All lanes : Anti-Ihh antibody [EP1192Y] (ab52919) at 1/5000 dilution

Lane 1 : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate

Lane 2 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate Lane 3 : C6 (Rat glial tumor glial cell) whole cell lysate

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 45 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Exposure time: Lane 1, Lane 3: 10 seconds, Lane 2: 80 seconds.

Primary and secondary antibody: incubated for 1h at room temperature.

Anti-Ihh antibody [EP1192Y] (ab52919) at 1/10000 dilution + Human cerebellum lysate at 15 µg

Secondary

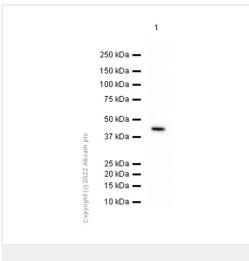
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG. at 1/2000 dilution

Predicted band size: 45 kDa

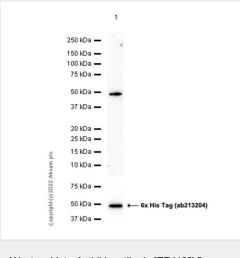
Exposure time: 10 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Primary and secondary antibody: incubated for 1h at room temperature.



Western blot - Anti-Ihh antibody [EP1192Y] (ab52919)



Western blot - Anti-Ihh antibody [EP1192Y] (ab52919) Anti-Ihh antibody [EP1192Y] (ab52919) at 1/10000 dilution + Histagged human Indian Hedgehog (IHH) recombinant protein (aa1-411) at 10 ng

Secondary

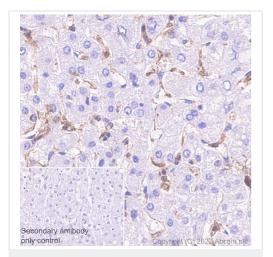
Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 45 kDa

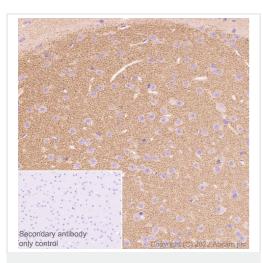
Exposure time: 180 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Primary and secondary antibody: incubated for 1h at room temperature.

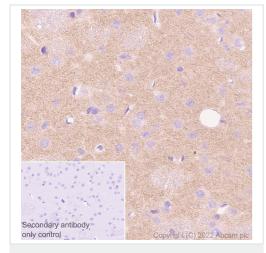


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ihh antibody [EP1192Y] (ab52919) The paraffin-embedded sections were Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins and labeling ab52919 at 1/200 dilutions for 30 mins at room temperature and followed Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Counterstained with hematoxylin. Positive staining on the Human liver.

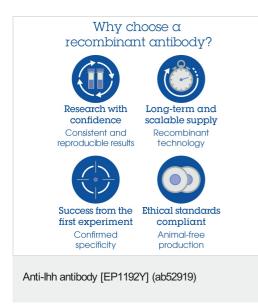


The paraffin-embedded sections were Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins and labeling ab52919 at 1/1000 dilutions for 30 mins at room temperature and followed Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). The immunostaining was performed on a Leica Biosystems BOND[©] RX instrument. Counterstained with hematoxylin. Positive staining on the Mouse cerebrum.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ihh antibody [EP1192Y] (ab52919)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Ihh antibody [EP1192Y] (ab52919) The paraffin-embedded sections were Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins and labeling ab52919 at 1/1000 dilutions for 30 mins at room temperature and followed Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). The immunostaining was performed on a Leica Biosystems BOND[©] RX instrument. Counterstained with hematoxylin. Positive staining on the Rat cerebrum.



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