Product Name: **Ihh Rabbit Polyclonal Antibody**
Catalog #: **APRab12458**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:10000-1:20000
Molecular Weight	45kDa

Antigen Information

Gene Name	IHH
Alternative Names	IHH; Indian hedgehog protein; IHH; HHG-2
Gene ID	3549.0
SwissProt ID	Q14623
Immunogen	The antiserum was produced against synthesized peptide derived from human Ihh. AA range:209-258

Background

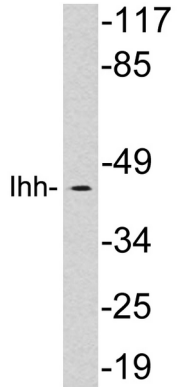
This gene encodes a member of the hedgehog family of proteins. The encoded preproprotein is proteolytically processed to

generate multiple protein products, including an N-terminal fragment that is involved in signaling. Hedgehog family proteins are essential secreted signaling molecules that regulate a variety of developmental processes including growth, patterning and morphogenesis. The protein encoded by this gene specifically plays a role in bone growth and differentiation. Mutations in this gene are the cause of brachydactyly type A1, which is characterized by shortening or malformation of the fingers and toes. Mutations in this gene are also the cause of acrocapitofemoral dysplasia. [provided by RefSeq, Nov 2015],disease: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.,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.,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).,PTM:Cholesterylation is required for N-product targeting to lipid rafts and multimerization.,PTM:Palmitoylated. N-palmitoylation is required for N-product multimerization and full activity.,PTM: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.,similarity:Belongs to the hedgehog family.,subcellular location:The C-terminal peptide diffuses from the cell.,subcellular location:The N-terminal peptide remains associated with the cell surface.,tissue specificity:Expressed in embryonic lung, and in adult kidney and liver.,

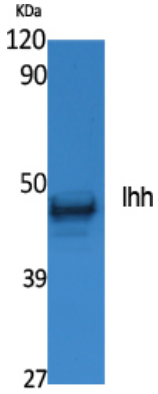
Research Area

Hedgehog;

Image Data



Western blot analysis of lysates from HepG2 cells, using Ihh antibody.



Western Blot analysis of extracts from NIH-3T3 cells, using Ihh Polyclonal Antibody.. Secondary antibody was diluted at 1:20000