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Anti-Gli3 Antibody
Catalog # ABO11075

Specification

Anti-Gli3 Antibody - Product Information

Application	**WB**
Primary Accession	P10071
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Transcriptional activator GLI3(GLI3) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Gli3 Antibody - Additional Information

Gene ID 2737

Other Names
Transcriptional activator GLI3, GLI3 form of 190 kDa, GLI3-190, GLI3 full length protein, GLI3FL, Transcriptional repressor GLI3R, GLI3 C-terminally truncated form, GLI3 form of 83 kDa, GLI3-83, GLI3

Calculated MW
169863 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Nucleus. Cytoplasm. Cell projection, cilium. GLI3FL is localized predominantly in the cytoplasm while GLI3R resides mainly in the nucleus. Ciliary accumulation requires the presence of KIF7 and SMO. Translocation to the nucleus is promoted by interaction with ZIC1.

Tissue Specificity
Is expressed in a wide variety of normal adult tissues, including lung, colon, spleen, placenta, testis, and myometrium.

Protein Name
Transcriptional activator GLI3

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Gli3(40-57aa SNEDESPGQTYHRERRNA), different from the related rat sequence by two amino acids, and from the related mouse sequence by one amino acid.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the GLI C2H2-type zinc-finger protein family.

Anti-Gli3 Antibody - Protein Information

Name GLI3

Function
Has a dual function as a transcriptional activator and a repressor of the sonic hedgehog (Shh) pathway, and plays a role in limb development. The full-length GLI3 form (GLI3FL) after phosphorylation and nuclear translocation, acts as an activator (GLI3A) while GLI3R, its C-terminally truncated form, acts as a repressor. A proper balance between the GLI3 activator and the repressor GLI3R, rather than the repressor gradient itself or the activator/repressor ratio gradient, specifies limb digit number and identity. In concert with TRPS1, plays a role in regulating the size of the zone of distal chondrocytes, in restricting the zone of PTHLH expression in distal cells and in activating chondrocyte proliferation. Binds to the minimal GLI- consensus sequence 5'-GGGTGGTC-3'.

Cellular Location
Nucleus. Cytoplasm. Cell projection, cilium. Note=GLI3FL is localized predominantly in the cytoplasm while GLI3R resides mainly in the nucleus. Ciliary accumulation requires the presence of KIF7 and SMO. Translocation to the nucleus is promoted by interaction with ZIC1

Tissue Location
Is expressed in a wide variety of normal adult tissues, including lung, colon, spleen, placenta, testis, and myometrium

Anti-Gli3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety

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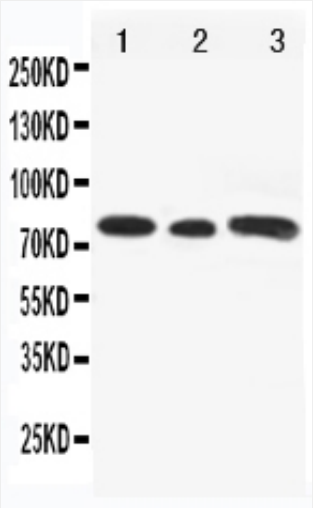
- Cell Culture

Anti-Gli3 Antibody - Images



Anti-Gli3 antibody, ABO11075, Western blottingLane 1: Rat Testis Tissue Lysate Lane 2: A549 Cell Lysate Lane 3: SW620 Cell Lysate

Anti-Gli3 Antibody - Background

GLI3(Gli-kruppel family member 3), also called ONCOGENE GLI3, encodes a member of the zinc finger gene family related to Kruppel, a gene that is known to regulate development in Drosophila. The GLI3 gene is expressed as an 8.5-kb mRNA in tissues such as testis, myometrium, placenta, and lung, and the protein product(relative molecular mass, 190,000) shows sequence-specific DNA binding. The GLI3 gene is mapped on 7p14.1. GLI3 is homologous to the Drosophila cubitus interruptus(ci) gene product(Ci), which regulates the Patched(pct), gooseberry(gsb), and decapentaplegic(dpp) genes. PKA-dependent processing of vertebrate GLI3 in developing limb generates a potent repressor in a manner antagonized by apparent long-range signaling from posteriorly localized Sonic hedgehog protein. The high relative abundance and potency of GLI3 repressor suggested specialization of GLI3 and its products for negative hedgehog pathway regulation.Coimmunoprecipitation and immunoblot studies showed that GLI3 protein is polyubiquitinated and that its processing depends on proteasome activity. The findings suggested that BTRC is required for GLI3 processing.