

# **Anti-Gli1 Picoband Antibody**

Catalog # ABO11814

# **Specification**

# **Anti-Gli1 Picoband Antibody - Product Information**

Application WB, IHC
Primary Accession P08151
Host Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Zinc finger protein GLI1(GLI1) detection. Tested with WB, IHC-P in Human.

#### Reconstitution

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

# **Anti-Gli1 Picoband Antibody - Additional Information**

**Gene ID 2735** 

#### **Other Names**

Zinc finger protein GLI1, Glioma-associated oncogene, Oncogene GLI, GLI1, GLI

#### **Calculated MW**

117904 MW KDa

#### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human<br/>br>

## **Subcellular Localization**

Cytoplasm. Nucleus. Tethered in the cytoplasm by binding to SUFU. Activation and translocation to the nucleus is promoted by interaction with STK36. Phosphorylation by ULK3 may promote nuclear localization. Translocation to the nucleus is promoted by interaction with ZIC1.

## **Tissue Specificity**

Testis, myometrium and fallopian tube. Also expressed in the brain with highest expression in the cerebellum, optic nerve and olfactory tract. .

#### **Protein Name**

Zinc finger protein GLI1

#### **Contents**

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

## **Immunogen**

E.coli-derived human GLi1 recombinant protein (Position: Q768-A1106). Human GLi1 shares 79%



amino acid (aa) sequence identity with mouse GLi1.

#### **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-Gli1 Picoband Antibody - Protein Information**

Name GLI1

**Synonyms GLI** 

#### **Function**

Acts as a transcriptional activator (PubMed:<a href="http://www.uniprot.org/citations/19706761" target=" blank">19706761</a>, PubMed:<a href="http://www.uniprot.org/citations/10806483" target="blank">10806483</a>, PubMed:<a href="http://www.uniprot.org/citations/19878745" target="blank">19878745</a>, PubMed:<a href="http://www.uniprot.org/citations/24076122" target="blank">24076122</a>, PubMed:<a href="http://www.uniprot.org/citations/24311597" target="blank">24311597</a>, PubMed:<a href="http://www.uniprot.org/citations/24217340" target="blank">24217340</a>). Binds to the DNA consensus sequence 5'-GACCACCCA-3' (PubMed: <a href="http://www.uniprot.org/citations/2105456" target=" blank">2105456</a>, PubMed:<a href="http://www.uniprot.org/citations/8378770" target="\_blank">8378770</a>, PubMed:<a href="http://www.uniprot.org/citations/24217340" target=" blank">24217340</a>). Regulates the transcription of specific genes during normal development (PubMed:<a href="http://www.uniprot.org/citations/19706761" target="\_blank">19706761</a>). Plays a role in craniofacial development and digital development, as well as development of the central nervous system and gastrointestinal tract. Mediates SHH signaling (PubMed: <a href="http://www.uniprot.org/citations/19706761" target=" blank">19706761</a>, PubMed:<a href="http://www.uniprot.org/citations/28973407" target="blank">28973407</a>). Plays a role in cell proliferation and differentiation via its role in SHH signaling (PubMed:<a href="http://www.uniprot.org/citations/11238441" target="blank">11238441</a>, PubMed:<a href="http://www.uniprot.org/citations/28973407" target="blank">28973407</a>).

# **Cellular Location**

Cytoplasm. Nucleus. Note=Tethered in the cytoplasm by binding to SUFU (PubMed:10806483). Activation and translocation to the nucleus is promoted by interaction with STK36 (PubMed:10806483). Phosphorylation by ULK3 may promote nuclear localization (PubMed:19878745). Translocation to the nucleus is promoted by interaction with ZIC1 (PubMed:11238441)

#### **Tissue Location**

Detected in testis (at protein level) (PubMed:2105456). Testis, myometrium and fallopian tube. Also expressed in the brain with highest expression in the cerebellum, optic nerve and olfactory tract (PubMed:19878745). Isoform 1 is detected in brain, spleen, pancreas, liver, kidney and placenta; isoform 2 is not detectable in these tissues (PubMed:19706761)



# **Anti-Gli1 Picoband Antibody - Protocols**

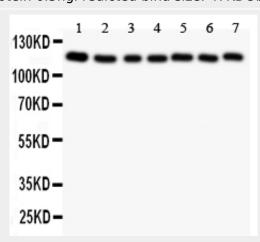
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **Anti-Gli1 Picoband Antibody - Images**

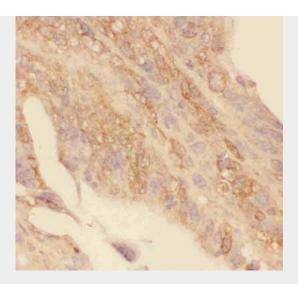
100KD — 70KD — 55KD — 35KD — 25KD —

Anti-Gli1 Picoband antibody, ABO11814-1.jpgAll lanes: Anti GLI1 (ABO11814) at 0.5ug/mlWB: Recombinant Human GLI1 Protein 0.5ngPredicted bind size: 47KDObserved bind size: 47KD



Anti-Gli1 Picoband antibody, ABO11814-2.jpgAll lanes: Anti GLI1 (ABO11814) at 0.5ug/mlLane 1: U87 Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: SKOV Whole Cell Lysate at 40ugLane 5: HT1080 Whole Cell Lysate at 40ugLane 6: COLO320 Whole Cell Lysate at 40ugLane 7: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 118KDObserved bind size: 118KD





Anti-Gli1 Picoband antibody, ABO11814-3.JPGIHC(P): Human Intestinal Cancer Tissue

# **Anti-Gli1 Picoband Antibody - Background**

GLI1, also known as GLI, is a protein originally isolated in human glioblastoma. The protein is encoded by GLI1 gene. It is mapped to 12q13.3. This gene is a member of a select group of cellular genes that are genetically altered in primary human tumors. GLI1 encodes a member of the GLI-Kruppel family of zinc finger proteins in the final steps of Hedgehog signaling in normal development and disease. The encoded transcription factor is activated by the sonic hedgehog signal transduction cascade and regulates stem cell proliferation. The activity and nuclear localization of this protein is negatively regulated by p53 in an inhibitory loop. Beside, various upstream patterning signals may be integrated by the Gli proteins to direct a coherent programme of neurogenesis.