

Rabbit anti-Human, Rat GLI2 Polyclonal Antibody | anti-GLI2 antibody

Anti-GLI2 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19737	Rabbit	Human, Rat	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

GLI2; Polyclonal Antibody; Anti-GLI2 Antibody Picoband; cAMP-dependent protein kinase type I-alpha regulatory subunit; GLI family zinc finger 2; Zinc finger protein GLI2; GLI family zinc finger protein 2; Tax helper protein; THP; anti-GLI2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed in breast cancers. Isoform 1 and isoform 4 are expressed in HTLV-1-infected T-cell lines. Isoform 1 and isoform 2 are strongly expressed in HTLV-1-infected T-cell lines. Isoform 3 and isoform 4 are weakly expressed in HTLV-1-infected T-cell lines.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-GLI2 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA
Application Notes	WB: 0.25-0.5ug/ml, Human, Rat IHC(Paraffin-embedded Section): 2-5ug/ml, Human ICC/IF: 5ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10 ⁶ cells, Human ELISA: 0.1-0.5ug/ml
Immunogen	E coli-derived human GLI2 recombinant protein (Position: A46-A1398).
Subcellular Localization	Nucleus, Cytoplasm, Cilium
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Functions as transcription regulator in the hedgehog (Hh) pathway. Functions as transcriptional activator. May also function as transcriptional repressor. Requires STK36 for full transcriptional activator activity. Required for normal embryonic development. Act as transcriptional activators in T-cell leukemia virus type 1 (HTLV-1)-infected cells in a Tax-dependent manner. Bind to the DNA sequence 5'-GAACCAACCA-3' which is part of the Tax-responsive element (TRE-2S) regulatory element that augments the Tax-dependent enhancer of HTLV-1. Are involved in the smoothened (SHH) signaling pathway. Acts as a transcriptional repressor.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of U2OS cells using anti-GLI2 antibody (AAA19737).Overlay histogram showing U2OS cells stained with AAA19737 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GLI2 Antibody (AAA19737, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 5. IF analysis of GLI2 using anti-GLI2 antibody (AAA19737) and anti-Beta Tubulin antibody (M01857-3).GLI2 was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-GLI2 Antibody (AAA19737) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-GLI2 Antibody (AAA19737) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-GLI2 Antibody (AAA19737) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Lane 2: human A549 whole cell lysates,Lane 3: human U2OS whole cell lysates,Lane 4: rat brain tissue lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GLI2 antigen affinity purified polyclonal antibody (#AAA19737) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for GLI2 at approximately 180-200 kDa. The expected band size for GLI2 is at 220 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-GLI2 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-GLI2 antibody	Primary Antibodies; Cancer; Cell Cycle; DNA/RNA; Epigenetics and Nuclear Signaling; Kinases/Phosphatases; Nuclear Import/Export; Protein Trafficking; RNA Processing; Signal Transduction
References	1. Bertolacini, C. D. P., Ribeiro-Bicudo, L. A., Petrin, A., Richieri-Costa, A., Murray, J. C. Clinical findings in patients with GLI2 mutations--phenotypic variability. Clin. Genet. 81: 70-75, 2012.2. Matsumoto, N., Fujimoto, M., Kato, R., Niikawa, N. Assignment of the human GLI2 gene to 2q14 by fluorecence in situ hybridization. Genomics 36: 220-221, 1996.3. Roessler, E., Ermilov, A. N., Grange, D. K., Wang, A., Grachtchouk, M., Dlugosz, A. A., Muenke, M. A previously unidentified amino-terminal domain regulates transcriptional activity of wild-type and disease-associated human GLI2. Hum. Molec. Genet. 14: 2181-2188, 2005.

NCBI AND UNIPROT INFORMATION

NCBI GI #	215274258
NCBI GeneID	2736
UniProt Accession #	P10070; O60252; O60253; O60254; O60255; Q15590; Q15591; Q4JHT4
Molecular Weight	86,482 Da
NCBI Official Full Name	Zinc finger protein GLI2
NCBI Official Synonym Full Names	GLI family zinc finger 2
NCBI Official Symbol	GLI2
NCBI Official Synonym Symbols	HPE9; PHS2; THP1; THP2

NCBI Protein Information	zinc finger protein GLI2; oncogene GLI2; tax helper protein 1; tax helper protein 2; GLI-Kruppel family member GLI2; tax-responsive element-2 holding protein; glioma-associated oncogene family zinc finger 2; tax-responsive element-25-bp sequence binding p
UniProt Protein Name	Zinc finger protein GLI2
UniProt Gene Name	GLI2
UniProt Entry Name	GLI2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/gli2-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-elisa/19737>