

## **Anti-GLI2** antibody



**Description** Unconjugated Rabbit polyclonal to GLI2

Model STJ193120

**Host** Rabbit

**Reactivity** Human, Mouse

**Applications** ELISA, WB

**Gene ID** <u>2736</u>

Gene Symbol GLI2

**Dilution range** WB 1:500-2000 ELISA 1:5000-20000

**Specificity** GLI2 Polyclonal Antibody detects endogenous levels of protein.

**Tissue Specificity** Isoform 1 and isoform 4 are expressed in HTLV-1-infected T-cell lines (at

protein level). 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.

**Purification** GLI2 antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

**Protein Name** Zinc finger protein GLI2 GLI family zinc finger protein 2 Tax helper protein

**Molecular Weight** 174 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:4318OMIM:165230</u>

Alternative Names Zinc finger protein GLI2 GLI family zinc finger protein 2 Tax helper 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 . Isoform 1, isoform 2, isoform 3 and isoform 4: 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'-

GAACCACCA-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. Isoform 5: Acts as

a transcriptional repressor.

Sequence and Domain Family The N-terminal domain confers transcriptional repressor activity, while the C-

terminal domain mediates transcriptional activation.

Cellular Localization Nucleus Cytoplasm Cell projection, cilium. STK36 promotes translocation to

the nucleus. In keratinocytes, it is sequestered in the cytoplasm by SUFU. In the absence of SUFU, it translocates to the nucleus. Isoform 1: Nucleus

Isoform 2: Nucleus

**Post-translational** Phosphorylated in vitro by ULK3. Phosphorylated by DYRK2; this inhibits **Modifications** GLI2 transcription factor activity and promotes proteasomal degradation of

GLI2 transcription factor activity and promotes proteasomal degradation of GLI2. Acetylation at Lys-757 inhibits Hh target gene expression, probably by

impeding entry into chromatin thus preventing promoter occupancy.

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