

Basic Information

Product Name	Anti-GLI2 Antibody	
Gene Name	GLI2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, rat	
Tested Application	WB, IHC, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E. coli-derived human GLI2 recombinant protein (Position: A46-A1398). Human GLI2 shares 82.8% amino acid (aa) sequence identity with mouse GLI2.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	180-200 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

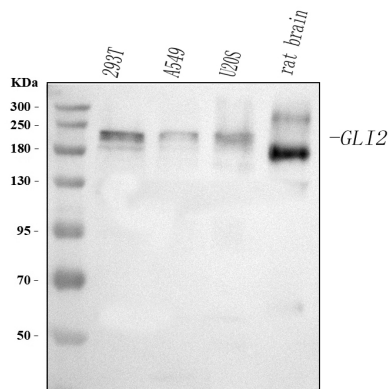
12 months from date of receipt, -20°C as supplied.

Background Information

GLI2 (Gli-Kruppel Family Member 2), also called ONCOGENE GLI2, is a protein that in humans is encoded by the GLI2 gene. Sequencing of GLI cDNA clones showed the presence of 5 tandem zinc fingers connected by histidine-cysteine links, which indicated that the gene belongs to the family of zinc finger genes related to Kruppel (Kr). The Drosophila gene Kr is a member of the gap class of segmentation genes; thoracic and anterior abdominal segments fail to form in Kr mutant embryos. By fluorescence in situ hybridization, Matsumoto et al. (1996) refined the assignment of the GLI2 gene to chromosome 2q14. Roessler et al. (2005) showed that GLI2-delta-N exhibited potent transcriptional activity in vivo: overexpression in mouse skin led to the formation of hedgehog-independent epithelial downgrowths resembling basal cell carcinomas, which in humans are

associated with constitutive hedgehog signaling.

Selected Validation Data



Western blot analysis of anti-GLI2 antibody (A00701-6). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

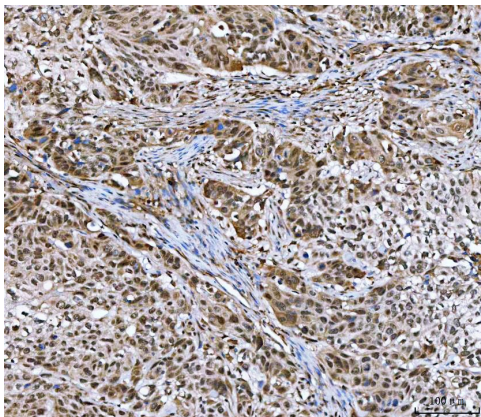
Lane 1: human 293T whole cell lysates,

Lane 2: human A549 whole cell lysates,

Lane 3: human U2OS whole cell lysates,

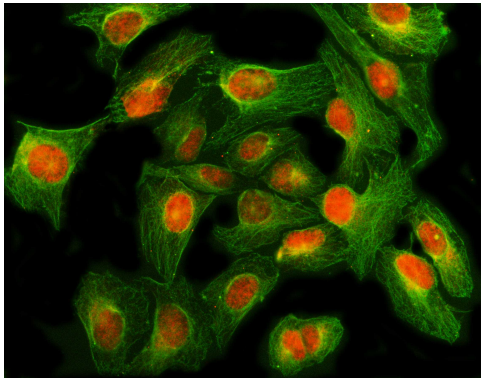
Lane 4: rat brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-GLI2 antigen affinity purified polyclonal antibody (A00701-6) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for GLI2 at approximately 180-200 kDa. The expected band size for GLI2 is at 168 kDa.



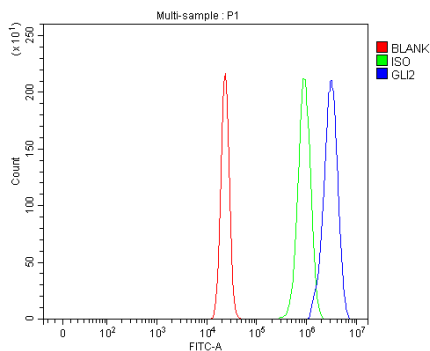
IHC analysis of GLI2 using anti-GLI2 antibody (A00701-6).

GLI2 was detected in a paraffin-embedded section of human esophageal squamous carcinoma tissue. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of GLI2 using anti-GLI2 antibody (A00701-6) and anti-Beta Tubulin antibody (M01857-3).

GLI2 was detected in an immunocytochemical section of U2OS cells. Cy3-Conjugated Anti-rabbit IgG Secondary Antibody (Red) (Catalog # BA1032) and Dylight488-conjugated Anti-mouse IgG Secondary Antibody (Green) (Catalog # BA1126) were used as secondary antibody.



Flow Cytometry analysis of U2OS cells using anti-GLI2 antibody (A00701-6).

Overlay histogram showing U2OS cells stained with A00701-6 (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 (A00701-6, 1:100). DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.