

#2585 Store at -20°C

GLI2 (R770) Antibody



✓ 100 µl
(10 Western mini-blot)

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This product is for *in vitro* research use only and is not intended for use in humans or animals.
This product is not intended for use as a therapeutic or in diagnostic procedures.

Entrez-Gene ID #2736
Swiss-Prot Acc. #P10070

Applications W, IP Transfected	Species Cross-Reactivity* H	Molecular Wt. 220 kDa	Source Rabbit
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Background: GLI was first identified as a gene amplified in a malignant glioma (1) and can transform primary cells in cooperation with adenovirus E1A (2). GLI belongs to the Kruppel family of zinc finger proteins and there are three GLI proteins in mammals: GLI1, GLI2 and GLI3 (3). GLI proteins, similar to their *Drosophila* homolog Ci (Cubitus interruptus), function as transcription factors activated by the Hedgehog signaling pathway which plays an important role in animal development and is aberrantly activated in many types of cancers (4,5).

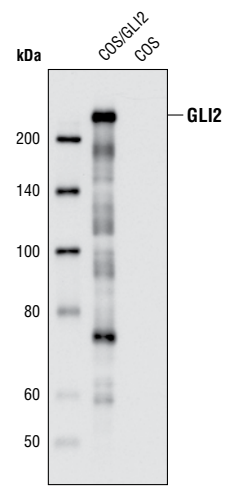
GLI2 contains both transcription repression and activation domains (6) and several isoforms of GLI2 have been reported that may have different activities (7-9). Overexpression of GLI2 in skin causes basal cell carcinoma in mice (10), while loss-of-function of GLI2 is associated with pituitary anomalies (11).

Specificity/Sensitivity: GLI2 (R770) Antibody detects transfected levels of human GLI2 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) corresponding to residues surrounding Arg770 of human GLI2. Antibodies are purified by peptide affinity chromatography.

Background References:

- (1) Kinzler, K.W. et al. (1987) *Science* 236, 70-3.
- (2) Ruppert, J.M. et al. (1991) *Mol Cell Biol* 11, 1724-8.
- (3) Kinzler, K.W. et al. (1988) *Nature* 332, 371-4.
- (4) Ingham, P.W. and McMahon, A.P. (2001) *Genes Dev* 15, 3059-87.
- (5) McMahon, A.P. et al. (2003) *Curr Top Dev Biol* 53, 1-114.
- (6) Sasaki, H. et al. (1999) *Development* 126, 3915-24.
- (7) Tanimura, A. et al. (1998) *J Virol* 72, 3958-64.
- (8) Tojo, M. et al. (2003) *Br J Dermatol* 148, 892-7.
- (9) Speek, M. et al. (2006) *BMC Mol Biol* 7, 13.
- (10) Grachtchouk, M. et al. (2000) *Nat Genet* 24, 216-7.
- (11) Roessler, E. et al. (2003) *Proc Natl Acad Sci USA* 100, 13424-9.



Western blot analysis of COS cell extracts, untransfected or transiently transfected with a construct expressing GLI2, using GLI2 (R770) Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by Western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:
Western blotting 1:1000
Immunoprecipitation 1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Companion Products:

- GLI1 Antibody #2553
- Shh/lhh Antibody #2271
- Shh Antibody #2287
- PTCH1 (C53A3) Rabbit mAb #2468
- PTCH2 (L849) Antibody #2464
- PTCH2 (G1191) Antibody #2470
- SUFU (C54G2) Rabbit mAb #2520
- SUFU (C81H7) Rabbit mAb #2522
- Phototope®-HRP Western Blot Detection System, Anti-rabbit IgG, HRP-linked Antibody #7071
- Anti-rabbit IgG, HRP-linked Antibody #7074
- Prestained Protein Marker, Broad Range (Premixed Format) #7720
- Biotinylated Protein Ladder Detection Pack #7727
- 20X LumiGLO® Reagent and 20X Peroxide #7003

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For Western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebra fish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae All—all species expected Species enclosed in parentheses are predicted to react based on 100% sequence homology.