

#2585 Store at -20°C

## GLI2 (R770) Antibody



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TECHNOLOGY®

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H	Transfected Only	220	Rabbit	#P10070	2736

### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### 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.

### 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 corresponding to residues surrounding Arg770 of human GLI2. Antibodies are purified by peptide affinity chromatography.

### Background

GLI was first identified as a gene amplified in a malignant glioma (1) capable of transforming primary cells in cooperation with adenovirus E1A (2). GLI belongs to the Krüppel family of zinc finger proteins that includes three mammalian GLI proteins: GLI1, GLI2, and GLI3 (3). These GLI proteins are similar to the *Drosophila* homolog Cubitus interruptus (Ci) and function as transcription factors activated by the Hedgehog signaling pathway. Hedgehog signaling plays an important role in animal development, and research studies have shown that this pathway 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).

### Background References

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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.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

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

### Applications Key

**WB:** Western Blotting

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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