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Store at -20C  
#2553

## GLI1 Antibody

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

<b>Applications:</b> W, IP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 160	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P08151	<b>Entrez-Gene Id:</b> 2735
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### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation

#### Dilution

1:1000  
1:50

### 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

GLI1 Antibody detects endogenous levels of total GLI1 protein.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly420 of human GLI1. Antibodies are purified by protein A and 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).

GLI1 itself is a transcriptional target of the Hedgehog signaling pathway (6-8) and is used as a marker of Hedgehog signaling activation in cancer research (9,10).

### 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. Lee, J. et al. (1997) *Development* 124, 2537-2552.
7. Dahmane, N. et al. (1997) *Nature* 389, 876-881.
8. Dai, P. et al. (1999) *J. Biol. Chem.* 274, 8143-8152.
9. Watkins, D.N. et al. (2003) *Nature* 422, 313-317.
10. Karhadkar, S.S. et al. (2004) *Nature* 431, 707-712.

### 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

**W:** Western Blotting **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** Human

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