

For Research Use Only. Not For Use In Diagnostic Procedures.

| Applications W, IP Endogenous | Species Cross-Reactivity* H | Molecular Wt. 160 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).

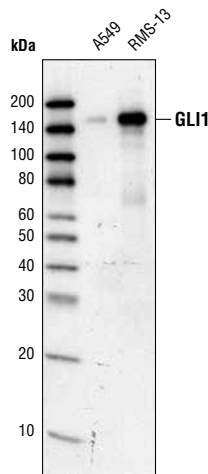
GLI1 itself is a transcriptional target of the Hedgehog signaling pathway (6-8) and is used as a marker of Hedgehog signaling activation in cancer research (9,10).

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 References:

- (1) Kinzler, K.W. et al. (1987) *Science* 236, 70-73.
- (2) Ruppert, J.M. et al. (1991) *Mol. Cell Biol.* 11, 1724-1728.
- (3) Kinzler, K.W. et al. (1988) *Nature* 332, 371-374.
- (4) Ingham, P.W. and McMahon, A.P. (2001) *Genes Dev.* 15, 3059-3087.
- (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.



Western blot analysis of total cell lysates from A549 and RMS-13 cells using GLI1 Antibody.

Entrez-Gene ID #2735
Swiss-Prot Acc. #P08151

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.

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—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.