

# GLI-2 (N-20): sc-20290

## BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. GLI-2 (GLI family zinc finger 2), also known as HPE9 or THP (tax helper protein), is a 1,586 amino acid nuclear protein that acts as a transcriptional activator and belongs to the GLI C<sub>2</sub>H<sub>2</sub>-type zinc-finger protein family. Localized to the nucleus, GLI-2 is thought to play a role in embryogenesis. The gene encoding GLI-2 maps to human chromosome 2q14.2, and when defective is the cause of holoprosencephaly type 9 (HPE9). GLI-2 exists as five alternatively spliced isoforms.

## CHROMOSOMAL LOCATION

Genetic locus: GLI2 (human) mapping to 2q14.2.

## SOURCE

GLI-2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GLI-2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-20290 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-20290 X, 200 µg/0.1 ml.

## APPLICATIONS

GLI-2 (N-20) is recommended for detection of GLI-2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GLI-2 (N-20) is also recommended for detection of GLI-2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for GLI-2 siRNA (h): sc-37913, GLI-2 shRNA Plasmid (h): sc-37913-SH and GLI-2 shRNA (h) Lentiviral Particles: sc-37913-V.

GLI-2 (N-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GLI-2 isoforms 5/α/β/γ/δ: 168/133/132/88/86 kDa.

Positive Controls: GLI-2 (h): 293T Lysate: sc-372196, K-562 whole cell lysate: sc-2203 or TF-1 cell lysate: sc-2412.

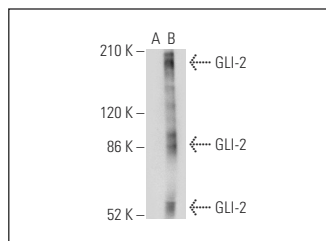
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA



GLI-2 (N-20): sc-20290. Western blot analysis of GLI-2 expression in non-transfected: sc-117752 (A) and human GLI-2 transfected: sc-372196 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Regl, G., et al. 2004. Activation of the Bcl-2 promoter in response to hedgehog/GLI signal transduction is predominantly mediated by GLI-2. *Cancer Res.* 64: 7724-7731.
2. Bar, E.E. and Chaudhry, A. 2007. Hedgehog signaling promotes medulloblastoma survival via BclII. *Am. J. Pathol.* 170: 347-355.
3. Chen, B.Y., et al. 2007. Hedgehog is involved in prostate basal cell hyperplasia formation and its progressing towards tumorigenesis. *Biochem. Biophys. Res. Commun.* 357: 1084-1089.
4. Kasper, M., et al. 2007. Efficient manipulation of Hedgehog/GLI signaling using retroviral expression systems. *Methods Mol. Biol.* 397: 67-78.
5. Alinger, B., et al. 2009. Hedgehog signaling is involved in differentiation of normal colonic tissue rather than in tumor proliferation. *Virchows Arch.* 454: 369-379.
6. Clement, C.A., et al. 2009. The primary cilium coordinates early cardiogenesis and hedgehog signaling in cardiomyocyte differentiation. *J. Cell Sci.* 122: 3070-3082.
7. Winklmayr, M., et al. 2010. Non-consensus GLI binding sites in Hedgehog target gene regulation. *BMC Mol. Biol.* 11: 2.
8. Javelaud, D., et al. 2011. GLI2 and M-MITF transcription factors control exclusive gene expression programs and inversely regulate invasion in human melanoma cells. *Pigment Cell Melanoma Res.* 24: 932-943.


 MONOS  
Satisfation  
Guaranteed

Try **GLI-2 (C-10): sc-271786**, our highly recommended monoclonal alternative to GLI-2 (N-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **GLI-2 (C-10): sc-271786**.