

GLI-4 (Q-20): sc-68543

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-4, also known as HKR4, is a 376 amino acid protein that localizes to the nucleus and contains 7 C₂H₂-type zinc fingers. Belonging to the krueppel C₂H₂-type zinc-finger protein family, GLI-4 may function as a transcriptional regulator, effectively activating or repressing the transcription of target genes. The gene encoding GLI-4 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

REFERENCES

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- Kinzler, K.W., et al. 1988. The GLI gene is a member of the krüppel family of zinc finger proteins. *Nature.* 332: 371-374.
- South, T.L. and Summers, M.F. 1990. Zinc fingers. *Adv. Inorg. Biochem.* 8: 199-248.
- Kas, K., et al. 1996. Assignment of the gene encoding human Krüppel-related zinc finger protein 4 (GLI4) to 8q24.3 by fluorescent *in situ* hybridization. *Cytogenet. Cell Genet.* 72: 297-298.
- Online Mendelian Inheritance in Man, OMIM™. 1997. Johns Hopkins University, Baltimore, MD. MIM Number: 165280. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Thomas, J.H. and Emerson, R.O. 2009. Evolution of C₂H₂-zinc finger genes revisited. *BMC Evol. Biol.* 9: 51.

CHROMOSOMAL LOCATION

Genetic locus: GLI4 (human) mapping to 8q24.3.

SOURCE

GLI-4 (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GLI-4 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-68543 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-68543 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

GLI-4 (Q-20) is recommended for detection of GLI-4 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).

Suitable for use as control antibody for GLI-4 siRNA (h): sc-75140, GLI-4 shRNA Plasmid (h): sc-75140-SH and GLI-4 shRNA (h) Lentiviral Particles: sc-75140-V.

GLI-4 (Q-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

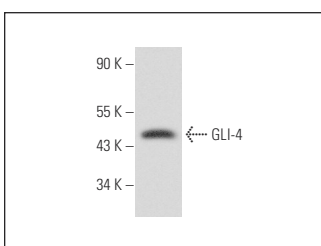
Molecular Weight of GLI-4: 41 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GLI-4 (Q-20): sc-68543. Western blot analysis of GLI-4 expression in SH-SY5Y whole cell lysate.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.