

# GLIS3 (P-20): sc-67912

## 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. GLIS3 (GLIS family zinc-finger 3), also known as ZNF515 (zinc-finger protein 515), is a 775 amino acid protein that localizes to the nucleus and contains 5 C<sub>2</sub>H<sub>2</sub>-type zinc-fingers. Expressed in a variety of tissues, including kidney, brain, liver, lung, ovary, pancreas, thymus and skeletal muscle, GLIS3 functions as both an activator and a suppressor of transcription, specifically binding the consensus sequence 5'-GACCACCAC-3' through its C<sub>2</sub>H<sub>2</sub>-type zinc-fingers. Defects in the gene encoding GLIS3 are a cause of NDH syndrome; a neonatal diabetes that is characterized by congenital hypo-hypothyroidism, congenital glaucoma, hepatic fibrosis and polycystic kidneys.

## REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610192. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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7. Beak, J.Y., Kang, H.S., Kim, Y.S. and Jetten, A.M. 2008. Functional analysis of the zinc-finger and activation domains of GLIS3 and mutant GLIS3 (NDH1). *Nucleic Acids Res.* 36: 1690-1702.

## CHROMOSOMAL LOCATION

Genetic locus: GLIS3 (human) mapping to 9p24.2; Glis3 (mouse) mapping to 19 C1.

## SOURCE

GLIS3 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GLIS3 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-67912 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-67912 X, 200 µg/0.1 ml.

## APPLICATIONS

GLIS3 (P-20) is recommended for detection of GLIS3 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

GLIS3 (P-20) is also recommended for detection of GLIS3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GLIS3 siRNA (h): sc-62382, GLIS3 siRNA (m): sc-62383, GLIS3 shRNA Plasmid (h): sc-62382-SH, GLIS3 shRNA Plasmid (m): sc-62383-SH, GLIS3 shRNA (h) Lentiviral Particles: sc-62382-V and GLIS3 shRNA (m) Lentiviral Particles: sc-62383-V.

GLIS3 (P-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GLIS3: 84 kDa.

## 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) 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.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.