

# GLIS2 (E-17): sc-68546

## BACKGROUND

GLIS2, also known as NPHP7, NKL, neuronal Krüppel-like protein or zinc-finger protein GLIS2, is a 524 amino acid protein that belongs to the GLI C<sub>2</sub>H<sub>2</sub>-type zinc-finger protein family. By recruiting the corepressors CtBP1 and HDAC3, GLIS2 represses the transcriptional activation mediated by β-catenin in the Wnt pathway. GLIS2 can act either as a transcription repressor or as a transcription activator and may be involved in neuron differentiation. Mutations of GLIS2 may be associated with development of progressive chronic kidney disease with characteristics resembling nephronophthisis. GLIS2 contains five tandem Cys2-His2 zinc-finger motifs that exhibit the highest homology to those of members of the GLI and Zic subfamilies of Krueppel-like proteins. GLIS2 is expressed at high levels in kidney and at low levels in heart, lung and placenta.

## REFERENCES

1. Gustafsson, M.K., et al. 2002. Myf5 is a direct target of long-range Shh signaling and Gli regulation for muscle specification. *Genes Dev.* 16: 114-126.
2. Zhang, F., et al. 2002. Characterization of GLIS2, a novel gene encoding a Gli-related, Krüppel-like transcription factor with transactivation and repressor functions. Roles in kidney development and neurogenesis. *J. Biol. Chem.* 277: 10139-10149.
3. Kim, Y.S., et al. 2002. Identification of GLIS1, a novel Gli-related, Krüppel-like zinc-finger protein containing transactivation and repressor functions. *J. Biol. Chem.* 277: 30901-30913.

## CHROMOSOMAL LOCATION

Genetic locus: GLIS2 (human) mapping to 16p13.3; Glis2 (mouse) mapping to 16 A1.

## SOURCE

GLIS2 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GLIS2 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-68546 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-68546 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.

## RESEARCH USE

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

## APPLICATIONS

GLIS2 (E-17) is recommended for detection of GLIS2 of mouse, rat and 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).

GLIS2 (E-17) is also recommended for detection of GLIS2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GLIS2 siRNA (h): sc-75142, GLIS2 siRNA (m): sc-75143, GLIS2 shRNA Plasmid (h): sc-75142-SH, GLIS2 shRNA Plasmid (m): sc-75143-SH, GLIS2 shRNA (h) Lentiviral Particles: sc-75142-V and GLIS2 shRNA (m) Lentiviral Particles: sc-75143-V.

GLIS2 (E-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

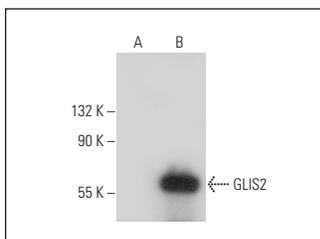
Molecular Weight of GLIS2: 56-60 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, NCI-H292 whole cell lysate: sc-364179 or GLIS2 (m): 293T Lysate: sc-120501.

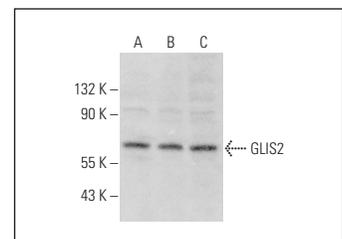
## RECOMMENDED SECONDARY REAGENTS

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



GLIS2 (E-17): sc-68546. Western blot analysis of GLIS2 expression in non-transfected: sc-117752 (A) and mouse GLIS2 transfected: sc-120501 (B) 293T whole cell lysates.



GLIS2 (E-17): sc-68546. Western blot analysis of GLIS2 expression in Hep G2 (A), NCI-H292 (B) and HEK293 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Ke, K., et al. 2015. Up-regulation of Glis2 involves in neuronal apoptosis after intracerebral hemorrhage in adult rats. *Cell. Mol. Neurobiol.* 35: 345-354.