

GLIS2 Antibody

Catalog # ASC11892

Specification

GLIS2 Antibody - Product Information

Application WB, IHC
Primary Accession Q9BZE0

Other Accession
Reactivity
Human, Mouse, Rat
Rabbit

Clonality Polyclonal Isotype IgG

Calculated MW Predicted: 58 kDa

Observed: 60 kDa KDa

Application Notes

GLIS2 antibody can be used for detection of GLIS2 by Western blot at 1 - 2 µg/ml.

Antibody can also be used for immunohistochemistry starting at 5

μg/mL.

GLIS2 Antibody - Additional Information

Gene ID **84662**

Target/Specificity

GLIS2; GLIS2 antibody is human, mouse and rat reactive.

Reconstitution & Storage

GLIS2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

GLIS2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

GLIS2 Antibody - Protein Information

Name GLIS2

Synonyms NKL

Function

Can act either as a transcriptional repressor or as a transcriptional activator, depending on the cell context. Acts as a repressor of the Hedgehog signaling pathway (By similarity). Represses the Hedgehog-dependent expression of Wnt4 (By similarity). Necessary to maintain the differentiated epithelial phenotype in renal cells through the inhibition of SNAI1, which itself induces the epithelial-to- mesenchymal transition (By similarity). Represses transcriptional activation mediated by CTNNB1 in the Wnt signaling pathway. May act by recruiting the corepressors CTBP1 and HDAC3. May be involved in neuron differentiation (By similarity).



Cellular LocationNucleus speckle. Cytoplasm

Tissue Location

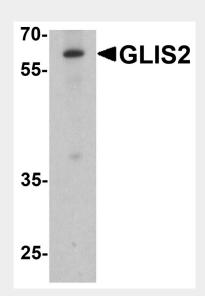
Expressed at high levels in kidney and at low levels in heart, lung and placenta. Expressed in colon

GLIS2 Antibody - Protocols

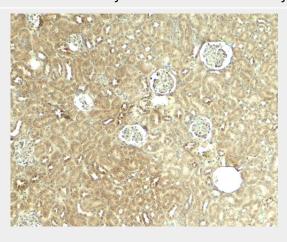
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GLIS2 Antibody - Images



Western blot analysis of GLIS2 in K562 cell lysate with GLIS2 antibody at 1 µg/ml.





Immunohistochemistry of GLIS2 in mouse kidney tissue with GLIS2 antibody at 5 µg/ml.

GLIS2 Antibody - Background

GLIS2, also known as neuronal Krueppel-like, is a 524 amino acid protein that belongs to the GLI C2H2-type zinc-finger protein family (1). GLIS2 can act either as a transcription repressor or as a transcription activator and may be involved in neuron differentiation (1,2). GLIS2 is expressed at high levels in kidney and at low levels in heart, lung and placenta. Mutations of GLIS2 have been suggested to be associated with development of progressive chronic kidney disease with characteristics resembling nephronophthisis (3,4).

GLIS2 Antibody - References

Vasanth S, ZeRuth G, Kang HS, et al. Identification of nuclear localization, DNA binding, and transactivating mechanisms of Kruppel-like zinc finger protein Gli-similar 2 (Glis2). J. Biol. Chem. 2011; 286:4749-59.

Hosking CR, Ulloa F, Hogan C, et al. The transcriptional repressor Glis2 is a novel binding partner for p120 catenin. Mol. Biol. Cell 2007; 18:1918-27.

Kim YS, Kang HS, Herbert R, et al. Kruppel-like zinc finger protein Glis2 is essential for the maintenance of normal renal functions. Mol. Cell Biol. 2008; 28:2358-67.

Attanasio M, Uhlenhaut NH, Sousa VH, et al. Loss of GLIS2 causes nephronophthisis in humans and mice by increased apoptosis and fibrosis. Nat. Genet. 2007; 39:1018-24.