

Kaiso (C-18): sc-21109

BACKGROUND

The POZ-zinc finger protein Kaiso is a member of the BTB/POZ family of zinc finger transcription factors implicated in embryonic development and cancer. Kaiso, also known as ZNF-kaiso, maps to human chromosome Xq24 and encodes a 627 amino acid protein. Kaiso is a transcriptional repressor that contains an amino-terminal BTB-POZ protein-protein interaction domain and three carboxy-terminal zinc finger domains of the C₂H₂ DNA-binding type. The zinc-finger domains of Kaiso specifically recognize symmetrically methylated DNA sequences *in vitro*. Kaiso is known to associate with p120^{ctn}. Kaiso functions throughout development, and its repressor functions are most apparent in the context of neural tissues. Kaiso is predominantly localized to the nucleus and is expressed in the brain, eye, ear, branchial arches and spinal cord as well as NIH3T3 cells.

REFERENCES

- Daniel, J. and Reynolds, A. 1999. The catenin p120^{ctn} interacts with Kaiso, a novel BTB/POZ domain zinc finger transcription factor. *Mol. Cell. Biol.* 19: 3614-3623.
- Daniel, J., et al. 2001. Monoclonal antibodies to Kaiso: a novel transcription factor and p120^{ctn}-binding protein. *Hybridoma* 20: 159-166.
- Prokhorchuk, A., et al. 2001. KAISO – a new member of the BTB/POZ family specifically binds to methylated DNA sequences. *Genetika* 37: 737-744.
- Kim, S., et al. 2001. Isolation and characterization of XKaiso, a transcriptional repressor that associates with the catenin Xp120^{ctn} in *Xenopus laevis*. *J. Biol. Chem.* 8: 8202-8208.
- Prokhortchouk, A., et al. 2001. The p120^{ctn} partner Kaiso is a DNA methylation-dependent transcriptional repressor. *Genes Dev.* 15: 1613-1618.
- Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 300329. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: ZBTB33 (human) mapping to Xq24; Zbtb33 (mouse) mapping to X A3.3.

SOURCE

Kaiso (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Kaiso 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-21107 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Kaiso (C-18) is recommended for detection of Kaiso of mouse, rat 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).

Kaiso (C-18) is also recommended for detection of Kaiso in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Kaiso siRNA (h): sc-38019, Kaiso siRNA (m): sc-38020, Kaiso shRNA Plasmid (h): sc-38019-SH, Kaiso shRNA Plasmid (m): sc-38020-SH, Kaiso shRNA (h) Lentiviral Particles: sc-38019-V and Kaiso shRNA (m) Lentiviral Particles: sc-38020-V.

Molecular Weight of Kaiso: 75 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243 or A-431 whole cell lysate: sc-2201.

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.

SELECT PRODUCT CITATIONS

- Dai, S.D., et al. 2010. Kaiso is expressed in lung cancer: its expression and localization is affected by p120^{ctn}. *Lung Cancer* 67: 205-215.

PROTOCOLS

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



Try **Kaiso (D-10): sc-365428** or **Kaiso (6F8): sc-23871**, our highly recommended monoclonal alternatives to Kaiso (C-18).