## SANTA CRUZ BIOTECHNOLOGY, INC.

# Kaiso (H-154): sc-98589



#### 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  $C_2H_2$  DNA-binding type. The zinc-finger domains of Kaiso specifically recognize symmetrically methylated DNA sequences *in vitro*. Kaiso is known to associate with p120 catenin. Kaiso functions throughout development, and its repressor functions are most apparant 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 NIH/3T3 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.
- 2. Daniel, J., et al. 2001. Monoclonal antibodies to Kaiso: a novel transcription factor and p120ctn-binding protein. Hybridoma 20: 159-166.
- Prokkhorchuk, 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 Xp120ctn in *Xenopus laevis*. J. Biol. Chem. 8: 8202-8208.
- Prokhortchouk, A., et al. 2001. The p120 catenin partner Kaiso is a DNA methylation-dependent transcriptional repressor. Genes Dev. 15: 1613-1618.

#### CHROMOSOMAL LOCATION

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

#### SOURCE

Kaiso (H-154) is a rabbit polyclonal antibody raised against amino acids 345-498 mapping within an internal region of Kaiso of human origin.

#### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98589 X, 200  $\mu$ g/0.1 ml.

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### PROTOCOLS

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

#### **APPLICATIONS**

Kaiso (H-154) 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), 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 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.

Kaiso (H-154) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Kaiso: 75 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, 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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



Kaiso (H-154): sc-98589. Western blot analysis of Kaiso expression in MOLT-4 whole cell lysate.

#### **RESEARCH USE**

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

MONOS Satisfation Guaranteed

Try Kaiso (D-10): sc-365428 or Kaiso (6F8): sc-23871, our highly recommended monoclonal alternatives to Kaiso (H-154).