

Kaiso (12H): sc-23930

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 Xq23 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 catenin. 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.

CHROMOSOMAL LOCATION

Genetic locus: ZBTB33 (human) mapping to Xq23; Zbtb33 (mouse) mapping to X A3.2.

SOURCE

Kaiso (12H) is a mouse monoclonal antibody raised against amino acids 1-504 representing full length Kaiso.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain 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-23930 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.

APPLICATIONS

Kaiso (12H) is recommended for detection of Kaiso of mouse, rat, human, canine, chicken and hamster 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 (12H) X TransCruz[™] antibody is recommended for Gel Supershift and ChIP applications.

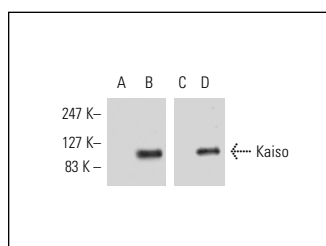
Molecular Weight of Kaiso: 75 kDa

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

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



Western blot analysis of Kaiso expression in untransfected HCT 116 (A, C) and Kaiso transfected HCT 116 (B, D) whole cell lysates. Antibodies tested include Kaiso (6F8): sc-23871 (A, B) and Kaiso (12H): sc-23930 (C, D).

SELECT PRODUCT CITATIONS

- Kantidze, O.L., et al. 2009. Association of the mammalian transcriptional regulator Kaiso with centrosomes and the midbody. *Cell Cycle* 8: 2303-2304.
- 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.
- Jones, J., et al. 2012. Nuclear Kaiso indicates aggressive prostate cancers and promotes migration and invasiveness of prostate cancer cells. *Am. J. Pathol.* 181: 1836-1846.
- Jones, J., et al. 2014. Nuclear localization of Kaiso promotes the poorly differentiated phenotype and EMT in infiltrating ductal carcinomas. *Clin. Exp. Metastasis* 31: 497-510.

RESEARCH USE

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

PROTOCOLS

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