

Kaiso (6F8): sc-23871

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 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 NIH/3T3 cells.

CHROMOSOMAL LOCATION

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

SOURCE

Kaiso (6F8) is a mouse monoclonal antibody raised against amino acids 1-504 representing full length Kaiso of human origin.

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-23871 X, 200 µg/0.1 ml.

Kaiso (6F8) is available conjugated to agarose (sc-23871 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23871 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-23871 PE), fluorescein (sc-23871 FITC), Alexa Fluor® 488 (sc-23871 AF488), Alexa Fluor® 546 (sc-23871 AF546), Alexa Fluor® 594 (sc-23871 AF594) or Alexa Fluor® 647 (sc-23871 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-23871 AF680) or Alexa Fluor® 790 (sc-23871 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Kaiso (6F8) is recommended for detection of Kaiso of mouse, rat, human, canine and avian 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), immunohistochemistry (including paraffin-embedded sections) (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.

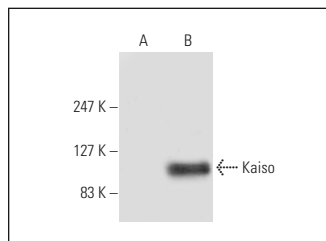
Kaiso (6F8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Kaiso: 75 kDa.

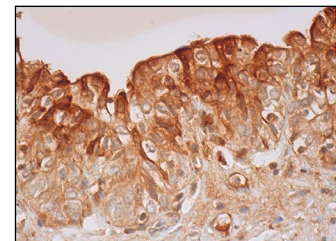
STORAGE

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

DATA



Kaiso (6F8): sc-23871. Western blot analysis of Kaiso expression in untransfected HCT 116 (A) and Kaiso transfected HCT 116 (B) whole cell lysates.



Kaiso (6F8): sc-23871. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic, membrane and nuclear staining of urothelial cells.

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 p120ctn. *Lung Cancer* 67: 205-215.
- Blattler, A., et al. 2013. ZBTB33 binds unmethylated regions of the genome associated with actively expressed genes. *Epigenetics Chromatin* 6: 13.
- Gasper, W.C., et al. 2014. Fully automated high-throughput chromatin immunoprecipitation for ChIP-seq: identifying ChIP-quality p300 monoclonal antibodies. *Sci. Rep.* 4: 5152.
- Schemionek, M., et al. 2015. Mtss1 is a critical epigenetically regulated tumor suppressor in CML. *Leukemia* 30: 823-832.
- Pozner, A., et al. 2016. Cell-specific Kaiso (ZBTB33) regulation of cell cycle through cyclin D1 and cyclin E1. *J. Biol. Chem.* 291: 24538-24550.
- Zhao, J.L., et al. 2019. Knockdown of P120 catenin aggravates endothelial injury under an impinging flow by inducing breakdown of adherens junctions. *Mol. Med. Rep.* 19: 541-548.
- Tian, W., et al. 2022. Kaiso phosphorylation at threonine 606 leads to its accumulation in the cytoplasm, reducing its transcriptional repression of the tumor suppressor CDH1. *Mol. Oncol.* 16: 3192-3209.
- Bocian, A., et al. 2023. Kaiso protein expression correlates with overall survival in TNBC patients. *J. Clin. Med.* 12: 370.

RESEARCH USE

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

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