abcam

ab12723

Anti-Kaiso antibody [6F / 6F8]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	6F / 6F8
Purification technique	Affinity purification
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1 µg for 10^6 Cells
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Hamster, Dog, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1-2 µg/mL
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Hamster, Dog, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	-

Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Hamster, Dog, Rat
Dilution info	-
Notes	-

Target data

See full target information ZBTB33

Function	Transcriptional regulator with bimodal DNA-binding specificity. Binds to methylated CpG dinucleotides in the consensus sequence 5'-CGCG-3' and also binds to the non-methylated consensus sequence 5'-CTGCNA-3' also known as the consensus kaiso binding site (KBS). Recruits the N-CoR repressor complex to promote histone deacetylation and the formation of repressive chromatin structures in target gene promoters. May contribute to the repression of target genes of the Wnt signaling pathway. May also activate transcription of a subset of target genes by the recruitment of CTNND2. Represses expression of MMP7 in conjunction with transcriptional corepressors CBFA2T3, CBFA2T2 and RUNX1T1 (PubMed:23251453).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

We can conjugate this antibody to FITC for you (please see ab150256 for details).
Want a custom formulation?
This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Kaiso also known as ZBTB33 is a transcriptional regulator with a mass of approximately 75 kilodaltons. It is a member of the POZ-zinc finger family of proteins. Researchers identified Kaiso as a dual-specificity transcription factor meaning it can bind to both DNA methylated and non-methylated sequences. It is widely expressed in various tissues including the brain liver heart and testis. This broad expression pattern indicates its potential involvement in multiple cellular processes.
Biological function summary	Kaiso functions as a transcriptional repressor influencing gene expression by binding to specific DNA sequences. It operates as part of a protein complex that includes other corepressors like N-CoR and SMRT. These interactions modulate chromatin structure which affects gene accessibility. Kaiso's repression of target genes is essential for maintaining cellular homeostasis. Research shows that Kaiso also interacts with p120-catenin a protein involved in cell adhesion linking its function to cytoskeletal dynamics and cell motility.
Pathways	Several studies show that Kaiso is part of key signaling cascades such as the Wnt/β-catenin pathway. It interacts with other pathway regulators including TCF/LEF transcription factors and is influenced by β-catenin signaling which plays an important role in embryonic development and cellular proliferation. Another significant pathway involving Kaiso is the Notch signaling pathway where Kaiso's function contributes to cell fate determination and differentiation. Through these pathways its ability to regulate gene expression impacts many biological processes.
Associated diseases and disorders	Kaiso has been linked to cancer progression and metastasis. Its downregulation or loss of function can lead to tumor growth primarily due to the deregulation of genes involved in cell proliferation and apoptosis. Studies highlight its association with colorectal cancer where it influences the expression of tumor suppressor genes. Additionally Kaiso's interaction with β-catenin connects it to other diseases like colorectal cancer where dysregulation of the Wnt pathway plays a critical role. These connections emphasize the potential impact of Kaiso on disease pathogenesis and its value as a therapeutic target.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

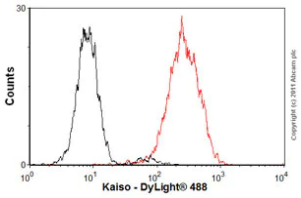
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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5 product images



Flow Cytometry (Intracellular) - Anti-Kaiso antibody [6F / 6F8] (ab12723)

Kaiso Flow Cytometry (Intracellular) staining using mouse Anti-Kaiso antibody

Overlay histogram showing HeLa cells stained with ab12723 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab12723, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

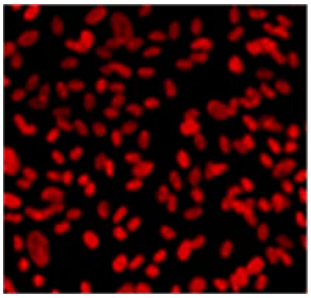
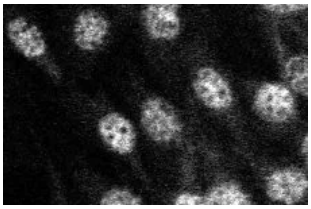


Image from Chen HC et al., PLoS One. 2012;7(5):e36864. Epub 2012 May 9.; Fig 4.; doi:10.1371/journal.pone.0036864; May 9, 2012, PLoS ONE 7(5): e36864.

Immunocytochemistry/ Immunofluorescence - Anti-Kaiso antibody [6F / 6F8] (ab12723)

Immunofluroesence analysis of Human ARPE-19 cells, staining Kaiso using ab12723.



Immunocytochemistry/ Immunofluorescence - Anti-Kaiso antibody [6F / 6F8] (ab12723)

Kaiso Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Kaiso antibody

Immunofluorescence using clone 6F / 6F8 on C2C12 cells.

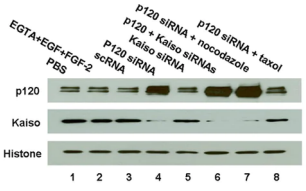
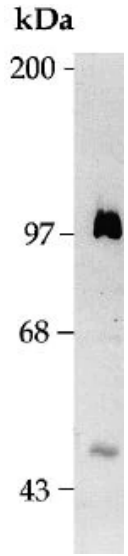


Image from Chen HC et al., PLoS One. 2012;7(5):e36864. Epub 2012 May 9.; Fig 4.; doi:10.1371/journal.pone.0036864; May 9, 2012, PLoS ONE 7(5): e36864.

Western blot - Anti-Kaiso antibody [6F / 6F8] (ab12723)

Representative western blot detecting Kaiso in ARPE-19 cells using ab12723.
All lanes:
Western blot - Anti-Kaiso antibody [6F / 6F8] (ab12723)

Predicted band size: 74 kDa



Western blot - Anti-Kaiso antibody [6F / 6F8] (ab12723)

Kaiso Western blot staining using mouse Anti-Kaiso antibody

Kaiso was IP'd from CSML0 cells using clone 6F / 6F8 and western blotted using clone 6F / 6F8.

Kaiso was IP'd from CSML0 cells using clone 6F / 6F8 and western blotted using clone 6F / 6F8.
All lanes:
Western blot - Anti-Kaiso antibody [6F / 6F8] (ab12723)

Predicted band size: 74 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.