abcam

ab3394

Anti-FOXG1 antibody

Key facts

Isotype	IgG
Host species	Goat
Storage buffer	pH: 7.3 Constituents: Tris buffered saline, 0.5% BSA
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human FOXG1 aa 450 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link P55316
Purification technique	Affinity purification Immunogen
Specificity	This antibody will recognise both human FOXG1A and FOXG1B, which are almost completely identical.
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	10 µg/mL

Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	0.3-1 µg/mL
Notes	A 1 hour primary incubation is recommended for this product. The additonal unknown band at 70kDa was successfully blocked with the immunising peptide.

Predicted

Species	Rat
Dilution info	-
Notes	-

Target data

See full target information FOXG1

Function	Transcription repression factor which plays an important role in the establishment of the regional subdivision of the developing brain and in the development of the telencephalon.

Storage

Shipped at conditions	Blue Ice
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

Supplementary info

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

Activity summary	FOXG1 also known as Brain Factor 1 (BF-1) is a transcription factor with a molecular weight of approximately 52 kDa. This protein plays an important role in the modulation of gene expression. FOXG1 is found mainly in the developing brain and other tissues of the central nervous system. In adult brains its expression levels significantly decrease although some residual expression persists in areas such as the hippocampus.
Biological function summary	FOXG1 regulates processes of neural development and brain function. It is not known to be part of a protein complex but FOXG1 binds to DNA influencing the transcriptional activity of genes involved in neurogenesis. The protein contributes to the development of structures such as the telencephalon and regulates transitions between different stages of neuronal cell development. Its role extends to maintaining the balance between proliferation and differentiation of neural progenitor cells.
Pathways	FOXG1 participates in the Notch and Wnt signaling pathways. These pathways are critical for cell fate determination and embryonic development. FOXG1 interacts with proteins like those in the Notch pathway to maintain neural progenitors in a proliferative state. In the Wnt signaling pathway FOXG1 helps in modulating the signaling that controls brain patterning working in concert with other transcription factors and signaling molecules.
Associated diseases and disorders	FOXG1 mutations can lead to congenital conditions such as FOXG1 syndrome and Rett syndrome. In such disorders abnormalities in FOXG1 disrupt normal neural development leading to cognitive and developmental impairments. The involvement of FOXG1 with the MeCP2 protein in Rett syndrome highlights its importance in maintaining normal neurological function. Understanding FOXG1's interactions and functions provides insights into potential therapeutic approaches for these disorders.

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

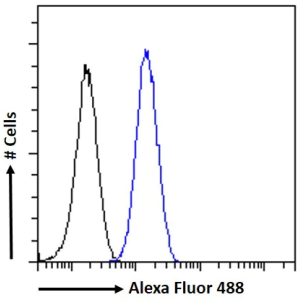
We do not recommend this combination. It is not covered by our product promise.

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.

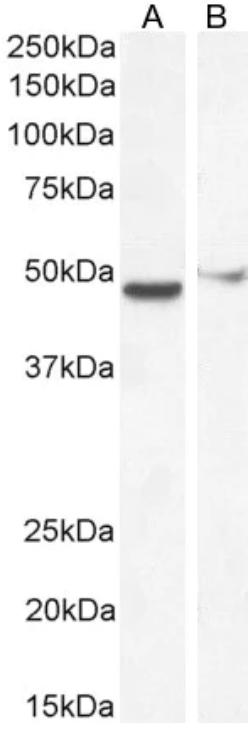
3 product images



Flow Cytometry - Anti-FOXG1 antibody (ab3394)

FOXG1 Flow Cytometry staining using goat Anti-FOXG1 antibody

Flow cytometric analysis of paraformaldehyde fixed A549 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10µg/mL) followed by Alexa Fluor 488 secondary antibody (1µg/mL). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.



Western blot - Anti-FOXG1 antibody (ab3394)

Detected by chemiluminescence.
All lanes:
Western blot - Anti-FOXG1 antibody (ab3394) at 0.5 µg/mL

Lane 1:
Human Cerebellum tissue lysate at 35 µg

Lane 2:
Cerebral Cortex tissue lysate at 35 µg

Predicted band size: 54 kDa



Western blot - Anti-FOXG1 antibody (ab3394)

Detected by chemiluminescence.
All lanes:
Western blot - Anti-FOXG1 antibody (ab3394) at 1 µg/mL

All lanes:
U251 cell lysate at 35 µg

Predicted band size: 54 kDa

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