abcam

ab314052

Anti-FOXP1 antibody [BLR134H] - BSA free

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.8 - 8.6 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human FOXP1 aa 600 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link Q9H334
Clone number	BLR134H

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse

Dilution info	Use at an assay dependent concentration.
Notes	-

ICC

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

IHC-P

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.

Notes	-

WB

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

Target data

See full target information FOXP1

Function

Transcriptional repressor (PubMed:18347093, PubMed:26647308). Can act with CTBP1 to synergistically repress transcription but CTPBP1 is not essential (By similarity). Plays an important role in the specification and differentiation of lung epithelium. Acts cooperatively with FOXP4 to regulate lung secretory epithelial cell fate and regeneration by restricting the goblet cell lineage program; the function may involve regulation of AGR2. Essential transcriptional regulator of B-cell development. Involved in regulation of cardiac muscle cell proliferation. Involved in the columnar organization of spinal motor neurons. Promotes the formation of the lateral motor neuron column (LMC) and the preganglionic motor column (PGC) and is required for respective appropriate motor axon projections. The segment-appropriate generation of spinal cord motor columns requires cooperation with other Hox proteins. Can regulate PITX3 promoter activity; may promote midbrain identity in embryonic stem cell-derived dopamine neurons by regulating PITX3. Negatively regulates the differentiation of T follicular helper cells T(FH)s. Involved in maintenance of hair follicle stem cell quiescence; the function probably involves regulation of FGF18 (By similarity). Represses transcription of various pro-apoptotic genes and cooperates with NF-kappa B-signaling in promoting B-cell expansion by inhibition of caspase-dependent apoptosis (PubMed:25267198). Binds to CSF1R promoter elements and is involved in regulation of monocyte differentiation and macrophage functions; repression of CSF1R in monocytes seems to involve NCOR2 as corepressor (PubMed:15286807, PubMed:18347093, PubMed:18799727). Involved in endothelial cell proliferation, tube formation and migration indicative for a role in angiogenesis; the role in neovascularization seems to implicate suppression of SEMA5B (PubMed:24023716). Can negatively regulate androgen receptor signaling (PubMed:18640093). Acts as a transcriptional activator of the FBXL7 promoter; this activity is regulated by AURKA (PubMed:28218735). Isoform 8. Involved in transcriptional regulation in embryonic stem cells (ESCs). Stimulates expression of transcription factors that are required for pluripotency and decreases expression of differentiation-associated genes. Has distinct DNA-binding specifities as compared to the canonical form and preferentially binds DNA with the sequence 5'-CGATACAA-3' (or closely related sequences) (PubMed:21924763). Promotes ESC self-renewal and pluripotency (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	Up to 12 months
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

REACH authorisation
Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Supplementary info

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

Activity summary	FOXP1 also known as forkhead box P1 is a transcription factor that belongs to the forkhead box (FOX) family. This protein weighs approximately 75-80 kDa and is expressed in a variety of tissues including the brain heart and lung. It plays a role in regulating gene expression acting as a transcriptional repressor or activator depending on the context. FOXP1 modulates several developmental processes through its interaction with DNA influencing cellular differentiation and proliferation. Its activity is vital in embryonic development and in maintaining the function of certain adult tissues.
Biological function summary	This transcription factor functions in the regulation of gene expression associated with neurodevelopment cardiac growth and immune responses. FOXP1 often forms a complex with other transcription factors such as FOXP2 and FOXP4 which enhances its regulatory roles. These interactions allow it to control various genetic programs that are important in the maturation and specification of different cell types. Moreover FOXP1 contributes to the modulation of B-cell development and function highlighting its importance in immune system regulation.
Pathways	FOXP1 takes part in several key signaling pathways including the Wnt signaling pathway and the TGF-beta pathway. The Wnt signaling pathway relates FOXP1 to β-catenin influencing the expression of genes involved in cell proliferation and differentiation. In the TGF-beta pathway its interactions with SMAD proteins underline its function in cellular processes such as apoptosis and epithelial–mesenchymal transition. These pathways emphasize FOXP1's contribution to controlling cell growth and development across different biological contexts.

Associated diseases and disorders	Disruptions in the function of this transcription factor have been linked to conditions like intellectual disability and certain types of cancer including lymphoma. The relationship between FOXP1 and proteins such as BCL2 in lymphoma highlights its role in tumorigenesis and progression. Additionally mutations affecting FOXP1 can disturb its interaction with other forkhead family proteins leading to neurodevelopmental disorders that impact cognitive abilities and behavior. Understanding these connections provides insights into how FOXP1's altered activity can contribute to disease pathology.

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

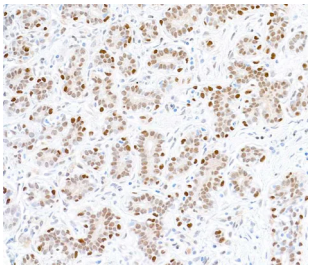
We do not recommend this combination. It is not covered by our product promise.

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.

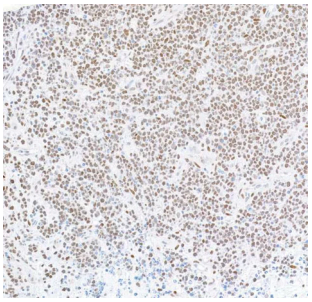
Full details and terms and conditions can be found here:
Terms & Conditions.

8 product images



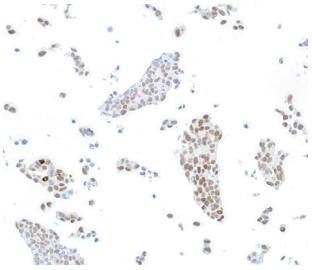
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXP1 antibody [BLR134H] - BSA free (ab314052)

Detection of human FOXP1 in FFPE breast carcinoma by immunohistochemistry Antibody:Rabbit anti-FOXP1 recombinant monoclonal antibody [BLR134H] (A700-134 Lot 1). Secondary:HRP-conjugated goat anti-rabbit IgG (A120-501P). Substrate:DAB.



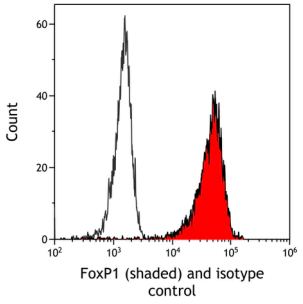
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXP1 antibody [BLR134H] - BSA free (ab314052)

Detection of human FOXP1 in FFPE Burkitt lymphoma by immunohistochemistry Antibody:Rabbit anti-FOXP1 recombinant monoclonal antibody [BLR134H] (A700-134 Lot 1). Secondary:HRP-conjugated goat anti-rabbit IgG (A120-501P). Substrate:DAB.



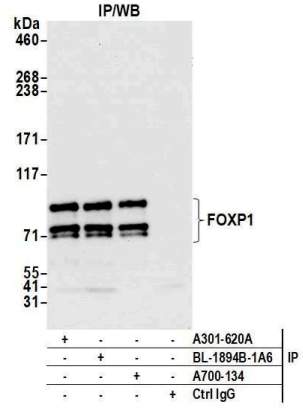
Immunocytochemistry - Anti-FOXP1 antibody [BLR134H] - BSA free (ab314052)

Detection of human FOXP1 in FFPE LNCaP cells by immunocytochemistry .Antibody:Rabbit antiFOXP1 recombinant monoclonal antibody [BLR134H] (A700-134 Lot 1). Secondary:HRP-conjugated goat anti-rabbit IgG (A120-501P). Substrate:DAB.



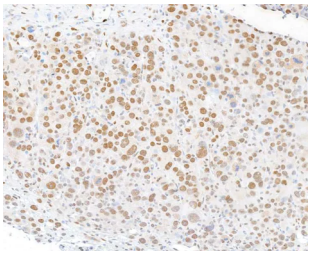
Flow Cytometry - Anti-FOXP1 antibody [BLR134H] - BSA free (ab314052)

Detection of human FoxP1 (shaded) in HeLa cells by flow cytometry. Antibody: Rabbit anti-FoxP1 recombinant monoclonal antibody [BLR134H]or isotype control (unshaded).Secondary: DyLight® 488-conjugated goat anti-rabbit IgG.



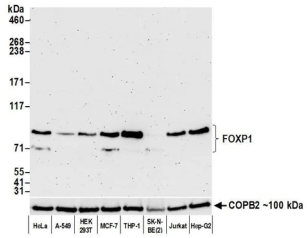
Immunoprecipitation - Anti-FOXP1 antibody [BLR134H] - BSA free (ab314052)

Samples: Whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from HeLa cells prepared using NETN lysis buffer. Antibodies:Rabbit anti-FOXP1 recombinant monoclonal antibody [BLR134H] (A700-134 lot 1) used for IP at 20 µl/mg lysate. FOXP1 was also immunoprecipitated by anti-FOXP1 antibodies BL-1894B-1A6 and A301-620A. For blotting immunoprecipitated FOXP1, A700-134 was used at 1:1000. Chemiluminescence with an exposure time of 10



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXP1 antibody [BLR134H] - BSA free (ab314052)

Detection of mouse FOXP1 in FFPE renal cell carcinoma by immunohistochemistry Antibody:Rabbit anti-FOXP1 recombinant monoclonal antibody [BLR134H] (A700-134 Lot 1). Secondary:HRP-conjugated goat anti-rabbit IgG (A120-501P). Substrate:DAB.



Western blot - Anti-FOXP1 antibody [BLR134H] - BSA free (ab314052)

Samples: Whole cell lysate (50 µg) from HeLa, A-549, HEK293T, MCF-7, THP-1, SK-N-BE(2), Jurkat, and Hep-G2 cells prepared using NETN lysis buffer. Antibody:Rabbit antiFOXP1 recombinant monoclonal antibody [BLR134H] (A700-134 lot 1) used at 1:1000. Secondary:HRPconjugated goat anti-rabbit IgG (A120-101P). Chemiluminescence with an exposure time of 30 seconds. Lower Panel: Rabbit anti-COPB2 antibody (A304-523A).
All lanes:
Western blot - Anti-FOXP1 antibody [BLR134H] - BSA free (ab314052) at 1/1000 dilution

Lane 1:
HeLa Whole cell lysate at 50 µg

Lane 2:
A 549 Whole cell lysate at 50 µg

Lane 3:
HEK 293 T Whole cell lysate at 50 µg

Lane 4:
MCF-7 Whole cell lysate at 50 µg

Lane 5:
THP-1 Whole cell lysate at 50 µg

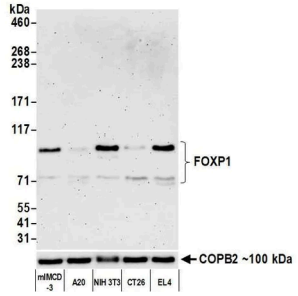
Lane 6:
SK-N-BE (2) Whole cell lysate at 50 µg

Lane 7:
Jurkat Whole cell lysate at 50 µg

Lane 8:
Hep G2 Whole cell lysate at 50 µg

Secondary

All lanes:
HRP conjugated goat anti-rabbit IgG



Western blot - Anti-FOXP1 antibody [BLR134H] - BSA free (ab314052)

Samples: Whole cell lysate (25 µg) from mIMCD-3, A20, NIH 3T3, CT26, and EL4 cells prepared using NETN lysis buffer. Antibody:Rabbit anti-FOXP1 recombinant monoclonal antibody [BLR134H] (A700-134 lot 1) used at 1:1000. Secondary:HRP-conjugated goat anti-rabbit IgG (A120-101P). Chemiluminescence with an exposure time of 30 seconds. Lower Panel: Rabbit anti-COPB2 antibody (A304-523A).
All lanes:
Western blot - Anti-FOXP1 antibody [BLR134H] - BSA free (ab314052) at 1/1000 dilution

Lane 1:
mIMCD-3 Whole cell lysate at 25 µg

Lane 2:
A20 Whole cell lysate at 25 µg

Lane 3:
NIH 3T3 Whole cell lysate at 25 µg

Lane 4:
CT26 Whole cell lysate at 25 µg

Lane 5:
EL4 Whole cell lysate at 25 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG

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