abcam

ab277100

Anti-ZBTB46 antibody [PCRP-ZBTB46-2B8]

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human ZBTB46. Database link Q86UZ6
Clone number	PCRP-ZBTB46-2B8
Purification technique	Affinity purification Protein A/G
Concentration	0.2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from bioreactor concentrate

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1-2 µg for 10^6 Cells
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Protein Array

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

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

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Target data

See full target information ZBTB46

Function	Transcription regulator that mediates differentiation of conventional and non-conventional dendritic cells, and which is involved in tolerance to gut microbiota. Together with RORgammaT (RORC), specifically expressed in type 3 innate lymphoid cells (ILC3s) that are required for tolerance to gut microbiota, to mediate differentiation of peripherally-induced regulatory T-cells (pTreg), which suppress inflammatory responses to commensal microorganisms. Functions as a transcription corepressor for PRDM1.

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

Supplementary info

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

Activity summary	ZBTB46 also known as zbtb46 Zfp405 or BTBD4 is a transcription factor with a molecular weight of approximately 60 kDa. It belongs to the BTB-ZF protein family and mainly expresses in dendritic cells and endothelial cells. This protein plays an important role in regulating gene expression by binding to DNA sequences through its zinc-finger domains. ZBTB46 serves as a specific marker for conventional dendritic cells which distinguishes them from other immune cells.
Biological function summary	The functioning of ZBTB46 involves the regulation of immune system responses and cellular development processes. ZBTB46 does not form a larger protein complex. Its activity impacts the maturation and function of certain immune cells especially those involved in presenting antigens to T cells. Through this regulation ZBTB46 influences various immune processes including inflammation and the maintenance of immune homeostasis helping to prevent excessive immune responses.
Pathways	ZBTB46 plays a role in the innate immune response and hematopoiesis. In the innate immune response it helps dictate the development of dendritic cells interacting with key proteins such as ID2 and E2-2. During hematopoiesis it guides the differentiation of multipotent progenitors toward specific cell lineages maintaining balanced production of immune cells. ZBTB46's involvement in these pathways confirms its importance in both immune system and blood cell development.
Associated diseases and disorders	ZBTB46 has associations with immunological disorders such as autoimmune diseases and inflammatory conditions. Dysregulation of ZBTB46 expression can contribute to abnormal immune responses potentially leading to chronic inflammation or autoimmunity. In conditions like systemic lupus erythematosus ZBTB46 dysregulation may occur in connection with proteins like STAT3 influencing disease progression and severity. This establishes ZBTB46 as a potential target for therapeutic interventions aiming to modulate immune function in such 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

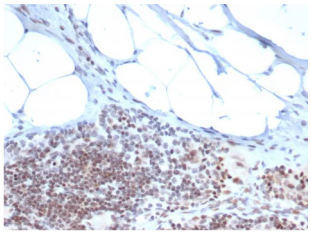
We do not recommend this combination. It is not covered by our product promise.

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.

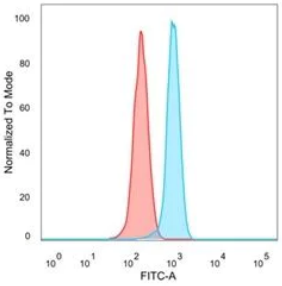
3 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ZBTB46 antibody [PCRP-ZBTB46-2B8] (ab277100)

ZBTB46 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-ZBTB46 antibody

Formalin-fixed, paraffin-embedded human tonsil tissue stained for ZBTB46 using ab277100 at 2 µg/ml in immunohistochemical analysis.



Flow Cytometry - Anti-ZBTB46 antibody [PCRP-ZBTB46-2B8] (ab277100)

ZBTB46 Flow Cytometry staining using mouse Anti-ZBTB46 antibody

Flow cytometry analysis of PFA-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling ZBTB46 using ab277100 at 2 µg / 10^6 cells followed by goat anti-mouse IgG-CF488 (blue); unstained cells (red).



Protein Array - Anti-ZBTB46 antibody [PCRP-ZBTB46-2B8] (ab277100)

Analysis of Protein Array containing more than 19,000 full-length human proteins using ab277100. Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

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