abcam

ab208016

Anti-AF10 antibody [EPR20810]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR20810
Purification technique	Affinity purification Protein A
Concentration	0.555 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat

Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

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

IHC-P

Tested

Species	Mouse
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human
Dilution info	1/1000

Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target data

See full target information MLLT10

Function	Probably involved in transcriptional regulation. In vitro or as fusion protein with KMT2A/MLL1 has transactivation activity. Binds to cruciform DNA. In cells, binding to unmodified histone H3 regulates DOT1L functions including histone H3 'Lys-79' dimethylation (H3K79me2) and gene activation (PubMed:26439302).

Storage

Shipped at conditions	Conditional Ambient
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

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

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

Activity summary	The AF10 protein also known as MLLT10 acts mechanically by associating with chromatin to regulate gene expression. The protein weighs approximately 225 kDa. Scientists find AF10 in a variety of tissues prominently in the nucleus where it influences gene regulation through interaction with chromatin structures. As a member of the AF family of proteins AF10 has a basic leucine zipper (bZIP) domain which facilitates its role in DNA binding and transcription regulation.
Biological function summary	AF10 participates in the regulation of gene transcription as part of larger protein complexes. It interacts with other chromatin-associated proteins and contributes to histone modification processes thereby affecting chromatin architecture and transcriptional activity. This binding to chromatin-modifying factors allows AF10 to maintain vital roles in controlling essential genes involved in cell cycle progression and differentiation.
Pathways	AF10 operates primarily in transcription regulation pathways and is linked to the HOX gene regulation pathway. It closely interacts with proteins such as MLL (Mixed-Lineage Leukemia) in the context of these pathways. Through its function in the transcription machinery AF10 facilitates the precise expression of gene sets necessary for proper cell lineage specification and development.
Associated diseases and disorders	Malfunctions in AF10 are linked to acute leukemias such as acute myeloid leukemia (AML) due to aberrant gene translocations involving the MLL gene. This aberration can result in the creation of MLL-AF10 fusion proteins which contribute to oncogenic processes. Furthermore irregular AF10 expression or mutation can be connected with other hematological disorders impacting hematopoiesis and leading to disease progression. Researchers study its connection with MLL in a bid to develop targeted therapies aimed at modulating these leukemic transformations.

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

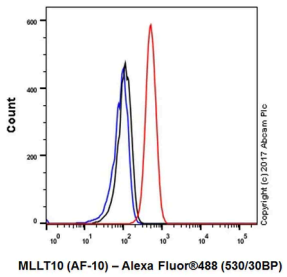
We do not recommend this combination. It is not covered by our product promise.

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.

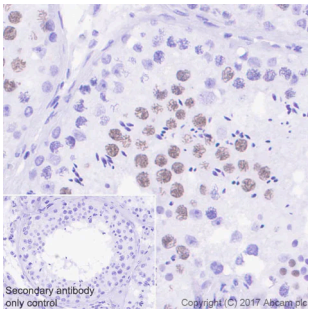
5 product images



Flow Cytometry (Intracellular) - Anti-AF10 antibody [EPR20810] (ab208016)

AF10 Flow Cytometry (Intracellular) staining using rabbit Anti-AF10 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized K562 (human chronic myelogenous leukemia cell line from bone marrow) cell line labeling AF10 with ab208016 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.

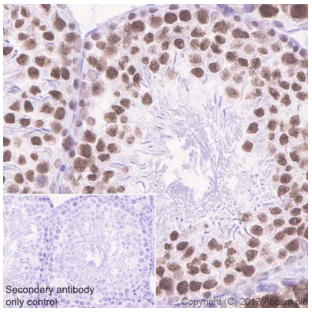


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AF10 antibody [EPR20810] (ab208016)

AF10 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-AF10 antibody

Immunohistochemical analysis of paraffin-embedded human testis tissue labeling AF10 with ab208016 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Nuclear staining in human testis (PMID: 7888665; PMID: 11756182). Counter stained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat-mediated antigen retrieval using Tris/EDTA buffer, pH 9.0.

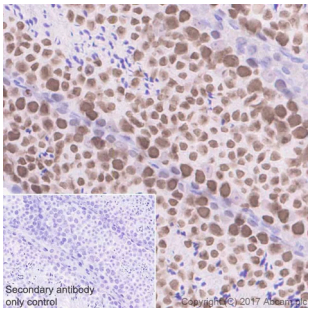


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AF10 antibody [EPR20810] (ab208016)

AF10 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-AF10 antibody

Immunohistochemical analysis of paraffin-embedded rat testis tissue labeling AF10 with ab208016 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Nuclear staining in rat testis (PMID: 7888665; PMID: 11756182). Counter stained with hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

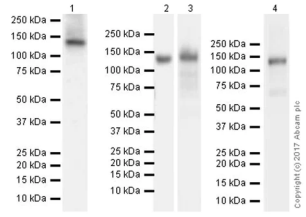
Perform heat-mediated antigen retrieval using Tris/EDTA buffer, pH 9.0.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AF10 antibody [EPR20810] (ab208016)

Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling AF10 with ab208016 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Nuclear staining in mouse testis (PMID: 7888665; PMID: 11756182). Counter stained with hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Perform heat-mediated antigen retrieval using Tris/EDTA buffer, pH 9.0.



Western blot - Anti-AF10 antibody [EPR20810] (ab208016)

Exposure time : Lanes 1-2: 3 minutes; Lane 3: 5 seconds; Lane 4: 15 seconds.

Blocking/Dilution buffer: 5% NFDM/TBST.

The blot was developed on a BIO-RAD® ChemiDoc™ MP instrument

Lanes 1 - 3:
Western blot - Anti-AF10 antibody [EPR20810] (ab208016) at 1/5000 dilution

Lane 4:
Western blot - Anti-AF10 antibody [EPR20810] (ab208016) at 1/1000 dilution

Lane 1:
K562 (human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate at 20 µg

Lane 2:
ES-D3 (mouse embryonic multipotent stem cell line) whole cell lysate at 20 µg

Lane 3:
Mouse testis lysate at 20 µg

Lane 4:
Rat testis lysate at 20 µg

Secondary

All lanes:

Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Developed using the ECL technique.

Predicted band size: 113 kDa

Observed band size: 130 kDa

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