abcam

ab264067

Anti-CMTM6 antibody [EPR23015-45]

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	EPR23015-45
Purification technique	Affinity purification Protein A
Concentration	0.452 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Species	Mouse

Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
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	Human
Dilution info	1/2000
Notes	-

Species	Mouse
Dilution info	1/2000
Notes	-

Expected

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

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Species	Rat
Dilution info	1/30
Notes	-

Expected

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

Target data

See full target information CMTM6

Function	Master regulator of recycling and plasma membrane expression of PD-L1/CD274, an immune inhibitory ligand critical for immune tolerance to self and antitumor immunity. Associates with both constitutive and IFNG-induced PD-L1/CD274 at recycling endosomes, where it protects PD-L1/CD274 from being targeted for lysosomal degradation, likely by preventing its STUB1-mediated ubiquitination. May stabilize PD-L1/CD274 expression on antigen presenting cells and potentiates

inhibitory signaling by PDCD1/CD279, its receptor on T-cells, ultimately triggering T-cell anergy.

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.

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.

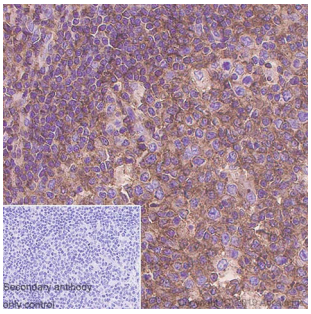
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

---

11 product images

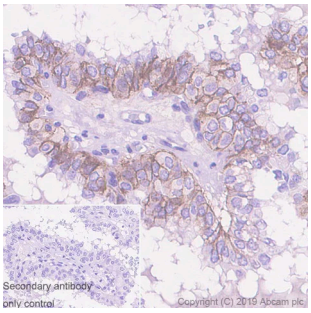


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

CMTM6 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CMTM6 antibody

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling CMTM6 with ab264067 at 1/2000 dilution (0.24 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on human tonsil. The section was incubated with ab264067 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.
Secondary antibody control/ Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

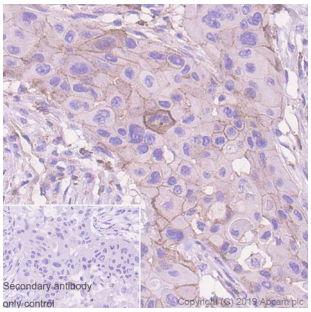


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

CMTM6 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CMTM6 antibody

Immunohistochemical analysis of paraffin-embedded Human thyroid cancer tissue labeling CMTM6 with ab264067 at 1/2000 dilution (0.24 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Membranous staining on human thyroid cancer (PMID: 28813410) The section was incubated with ab264067 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND™ RX instrument Counterstained with Hematoxylin.
Secondary antibody only control/ Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

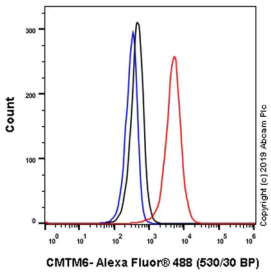


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

CMTM6 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CMTM6 antibody

Immunohistochemical analysis of paraffin-embedded Human pancreatic cancer tissue labeling CMTM6 with ab264067 at 1/2000 dilution (0.24 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Membranous staining on human pancreatic cancer (PMID/ 28813417) The section was incubated with ab264067 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.
Secondary antibody only control/ Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

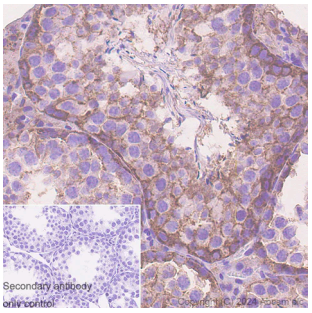
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Flow Cytometry (Intracellular) - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

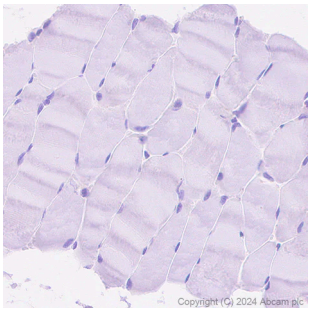
CMTM6 Flow Cytometry (Intracellular) staining using rabbit Anti-CMTM6 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized MDA-MB-231 (human breast adenocarcinoma epithelial cell) cells labelling CMTM6 with ab264067 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730)isotype control (black)and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



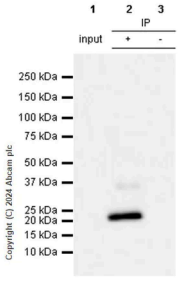
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling CMTM6 with ab264067 at 1/2000 dilution, incubated for 30 mins at room temperature, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Positive staining on mouse testis. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

Immunohistochemical analysis of paraffin-embedded Mouse skeletal muscle tissue labeling CMTM6 with ab264067 at 1/2000 dilution, incubated for 30 mins at room temperature, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Low expression: nearly no staining on mouse skeletal muscle. Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Immunoprecipitation - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

ab264067 at 1/30 dilution immunoprecipitating CMTM6 in mouse spleen tissue lysate. Western blot was performed from the immunoprecipitate using ab264067 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution. Lane 1: Mouse spleen tissue lysate 10 µg Lane 2: ab264067 IP in mouse spleen tissue lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab264067 in mouse spleen tissue lysate. Blocking/Dilution buffer: 5% NFDM/TBST. Exposure time: 8 seconds.
Lane 2:
Immunoprecipitation - Anti-CMTM6 antibody [EPR23015-45] (ab264067) at 1/30 dilution

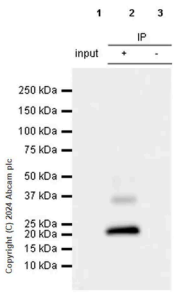
Lane 2:
Immunoprecipitation - Anti-CMTM6 antibody [EPR23015-45] - BSA and Azide free (ab264076)

All lanes:
Mouse spleen tissue lysate at 10 µg

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 8s



Immunoprecipitation - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

ab264067 at 1/30 dilution immunoprecipitating CMTM6 in rat spleen tissue lysate. Western blot was performed from the immunoprecipitate using ab264067 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution. Lane 1: Rat spleen tissue lysate 10 µg Lane 2: ab264067 IP in rat spleen tissue lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab264067 in rat spleen tissue lysate. Blocking/Dilution buffer: 5% NFDM/TBST. Exposure time: 6 seconds.
Lane 2:
Immunoprecipitation - Anti-CMTM6 antibody [EPR23015-45] (ab264067) at 1/30 dilution

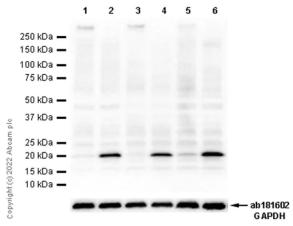
Lane 2:
Immunoprecipitation - Anti-CMTM6 antibody [EPR23015-45] - BSA and Azide free (ab264076)

All lanes:
Mouse spleen tissue lysate at 10 µg

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 6s



Western blot - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

Blocking and diluting buffer and concentration: 5% NFDM /TBST. ab181602 was used as GAPDH loading control. We recommend not to boil the samples after lysis to get desired WB bands.
All lanes:
Western blot - Anti-CMTM6 antibody [EPR23015-45] (ab264067) at 1/10000 dilution

Lane 1:
MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysate boiled at 20 µg

Lane 2:
MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysate unboiled at 20 µg

Lane 3:
BxPC-3 (Human pancreas adenocarcinoma epithelial cell) whole cell lysate boiled at 20 µg

Lane 4:
BxPC-3 (Human pancreas adenocarcinoma epithelial cell) whole cell lysate unboiled at 20 µg

Lane 5:
Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate boiled at 20 µg

Lane 6:
Raji (Human Burkitt's lymphoma B lymphocyte) whole cell lysate unboiled at 20 µg

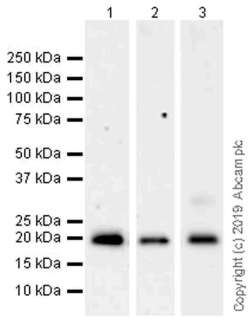
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 20 kDa

Observed band size: 20 kDa

Exposure time: 7s



Western blot - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

CMTM6 Western blot staining using rabbit Anti-CMTM6 antibody

Blocking and dilution buffer: 5% NFDM/TBST.
Exposure times.

Lanes 1-2: 3 minutes

Lane 3: 48 seconds.

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 28813417).

All lanes:
Western blot - Anti-CMTM6 antibody [EPR23015-45] (ab264067) at 1/1000 dilution

Lane 1:
MDA-MB-231 (human breast adenocarcinoma epithelial cell), whole cell lysate at 20 µg

Lane 2:
Human tonsil tissue lysate at 20 µg

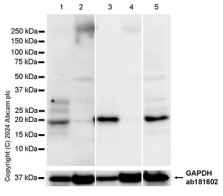
Lane 3:
BxPC-3 (human pancreas adenocarcinoma epithelial cell), whole cell lysate at 20 µg

Secondary

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

Predicted band size: 20 kDa

Observed band size: 20 kDa



Western blot - Anti-CMTM6 antibody [EPR23015-45] (ab264067)

Exposure time: Lane 1-2: 15 seconds Lane 3-5: 10 seconds Blocking/Diluting buffer and concentration 5% NFDM/TBST Loading control: Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1/200000) (36KDa). Low expression: skeletal muscle. This blot was developed using a high sensitivity ECL substrate. Samples are non-boiled as boiling may cause protein aggregates.
Lanes 1 - 5:
Western blot - Anti-CMTM6 antibody [EPR23015-45] (ab264067) at 1/1000 dilution

Lanes 1 - 5:
Western blot - Anti-CMTM6 antibody [EPR23015-45] - BSA and Azide free (ab264076)

Lane 1:
Mouse spleen tissue lysate at 20 µg

Lane 2:
Mouse skeletal muscle tissue lysate at 20 µg

Lane 3:
Rat spleen tissue lysate at 20 µg

Lane 4:

Rat skeletal muscle tissue lysate at 20 µg

Lane 5:
Raji (human Burkitt's lymphoma B lymphocyte) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

---

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