abcam

ab275381

Anti-TWEAKR/FN14 antibody [EPR23427-30] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR23427-30
Purification technique	Affinity purification Protein A
Concentration	0.993 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Mouse
Dilution info	-

Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Mouse
Dilution info	-
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

WB

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information Tnfrsf12a

Function	Receptor for TNFSF12/TWEAK (By similarity). Weak inducer of apoptosis in some cell types. Promotes angiogenesis and the proliferation of endothelial cells. May modulate cellular adhesion to matrix proteins.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab275381 is the carrier-free version of ab275375.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes,

oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

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

Activity summary	The TWEAKR/FN14 known also as FN14 protein is a receptor primarily involved in cellular signaling. It is found on the cell surface and has a molecular weight of approximately 14 kDa. This receptor expresses in various tissues but its expression is especially high in the liver kidney and muscle tissues. Through its engagement with its ligand TWEAK (Tumor Necrosis Factor-Like Weak Inducer of Apoptosis) TWEAKR/FN14 participates in signal transduction processes that regulate cell survival and proliferation.
Biological function summary	TWEAKR/FN14 influences multiple cellular activities including inflammation proliferation and apoptosis. It does not solely function in isolation often interacting with other proteins in complex networks. In fact FN14 often couples its activity with downstream signaling proteins that impact pathways involved in tissue remodeling and repair. The receptor's ability to mediate these processes makes it a significant regulator of tissue response to damage.
Pathways	Signaling through TWEAKR/FN14 primarily involves the NF-κB and MAPK pathways. These signaling pathways are critical for mediating cellular responses to external stimuli such as stress or injury. The NF-κB pathway in particular plays a role in immune and inflammatory responses where FN14 through its interaction modulates these responses. Additionally proteins such as TRAF (TNF Receptor Associated Factor) are related to FN14 through these pathways contributing to its signaling functions.
Associated diseases and disorders	Dysregulation of TWEAKR/FN14 is linked to pathological conditions such as cancer and fibrosis. Overexpression of FN14 has been observed in several malignancies and its interaction with TWEAK has been implicated in tumorigenic processes. Meanwhile in fibrosis FN14 is associated with excessive tissue repair and scarring connected to the accumulation of extracellular matrix proteins. Altered expression levels and activity of FN14 with its partner proteins can contribute to the progression of these diseases highlighting its potential as a therapeutic target.

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.

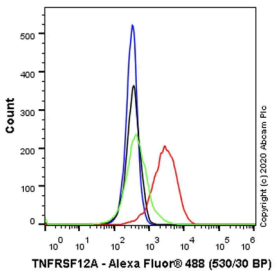
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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3 product images



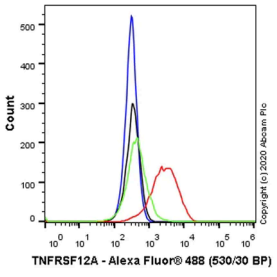
Flow Cytometry - Anti-TWEAKR/FN14 antibody [EPR23427-30] - BSA and Azide free (ab275381)

TWEAKR/FN14 Flow Cytometry staining using rabbit Anti-TWEAKR/FN14 antibody

This data was developed using ab275375, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of NIH/3T3 (Mouse embryonic fibroblast) (starved for 8h then treated with 30ng/ml PMA for 16h) (Red) / Untreated control (Green) cells labelling TWEAKR/FN14 with ab275375 at 1/500 dilution (0.1ug) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.



Flow Cytometry - Anti-TWEAKR/FN14 antibody [EPR23427-30] - BSA and Azide free (ab275381)

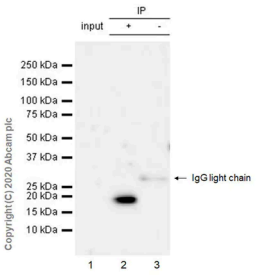
TWEAKR/FN14 Flow Cytometry staining using rabbit Anti-TWEAKR/FN14 antibody

This data was developed using ab275375, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of NIH/3T3 (Mouse embryonic fibroblast) (starved for 8h then treated with 10ng/ml FGF2 for 16h) (Red) / Untreated control (Green) cells labelling TWEAKR/FN14 with ab275375 at 1/500 dilution (0.1ug) compared with a Rabbit monoclonal IgG (ab172730) isotype

control (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.



Immunoprecipitation - Anti-TWEAKR/FN14 antibody [EPR23427-30] - BSA and Azide free (ab275381)

This data was developed using ab275375, the same antibody clone in a different buffer formulation.
TWEAKR/FN14 was immunoprecipitated from 0.35 mg C2C12 (mouse myoblasts myoblast) whole cell lysate with ab275375 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab275375 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.

Lane 1: C2C12 (mouse myoblasts myoblast) whole cell lysate 10 ug

Lane 2: ab275375 IP in C2C12 whole cell lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab275375 in C2C12 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 50 seconds.

The molecular weight observed is consistent with what has been described in the literature (PMID:17383968).

All lanes:
Immunoprecipitation - Anti-TWEAKR/FN14 antibody [EPR23427-30] (ab275375)

Predicted band size: 14 kDa

Observed band size: 17 kDa

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