abcam

ab238140

Anti-Tetraspanin-33 antibody [EPR23121-146]

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	EPR23121-146
Purification technique	Affinity purification Protein A
Concentration	0.563 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human, Recombinant fragment - Human, Rat, Mouse
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/500
Notes	-

Not recommended

Species	Recombinant fragment - Human, Rat, Mouse
Dilution info	-
Notes	-

Dot

Tested

Species	Recombinant fragment - Human
Dilution info	1/1000
Notes	-

Expected

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

Not recommended

Species	Rat, Mouse
Dilution info	-
Notes	-

WB

Not recommended

Species	Rat, Human, Mouse, Recombinant fragment - Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Rat, Human, Recombinant fragment - Human
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Recombinant fragment - Human, Rat, Mouse
Dilution info	-
Notes	-

Target data

See full target information TSPAN33

Function

Part of TspanC8 subgroup, composed of 6 members that interact with the transmembrane metalloprotease ADAM10. This interaction is required for ADAM10 exit from the endoplasmic reticulum and for enzymatic maturation and trafficking to the cell surface as well as substrate specificity. Different TspanC8/ADAM10 complexes have distinct substrates (PubMed:26686862, PubMed:30463011, PubMed:37516108). Plays an important role in normal erythropoiesis (By similarity). It has a role in the differentiation of erythroid progenitors (By similarity). Negatively regulates ligand-induced Notch activity probably by regulating ADAM10 activity (PubMed:26686862). Mediates docking of ADAM10 to zonula adherens by interacting with ADAM10 and, in a PDZD11-dependent manner, with the zonula adherens protein PLEKHA7 (PubMed:30463011).

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	Tetraspanin-33 also known as TSPAN33 or TSPN33 is a protein belonging to the tetraspanin family. It plays a role in organizing other proteins into functional complexes on the cell surface. Tetraspanin-33 weighs approximately 34 kDa and is mainly expressed in hematopoietic tissues which include the bone marrow and lymphoid organs. It is a transmembrane protein with four domains that spans the lipid bilayer influencing cell signaling by clustering with integrins and other membrane proteins.
Biological function summary	The organization of proteins into complexes forms an important function of Tetraspanin-33 in the immune system. It regulates cell adhesion migration and signaling impacting various types of immune responses. Tetraspanin-33 interacts with integrins forming tetraspanin-enriched microdomains. Such interactions stabilize the functional arrangements of signaling molecules ensuring precise communication and activation in immune cells.
Pathways	Tetraspanin-33 has influential roles in integrin-mediated signaling and immune response pathways. It modulates beta-1 integrin activity and works alongside

	proteins such as CD9 and CD81 which are also tetraspanins involved in the orchestration of cell adhesion and motility. The signaling modulated by Tetraspanin-33 plays key roles in mediating the cell-cell interactions needed for effective immune function providing a scaffold necessary for the activation and regulation of signaling cascades.
Associated diseases and disorders	Dysfunctions involving Tetraspanin-33 appear in immune system disorders and certain types of cancer. Aberrant expression or mutations can relate to conditions such as leukemia where Tetraspanin-33 interacts with proteins like CD53 another tetraspanin involved in immune cell signaling. Additionally alterations in Tetraspanin-33 function might contribute to autoimmune disorders highlighting its importance in maintaining immune system balance and responding to pathogens properly.

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

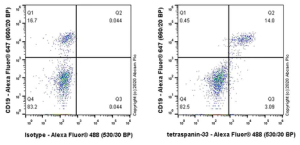
We do not recommend this combination. It is not covered by our product promise.

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.

2 product images



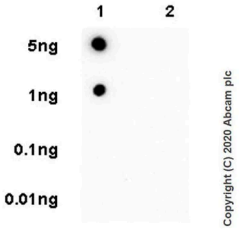
Flow Cytometry - Anti-Tetraspanin-33 antibody [EPR23121-146] (ab238140)

Tetraspanin-33 Flow Cytometry staining using rabbit Anti-Tetraspanin-33 antibody

Flow cytometric analysis of human peripheral blood mononuclear cells (PBMC) treated with 1ug/ml human CD40 ligand and 100U/ml human IL-4 for 72h labeling Tetraspanin-33 with ab238140 at 1/500 dilution (Right) compared with a Rabbit monoclonal IgG Isotype control (ab172730) (Left). Goat anti-rabbit IgG (Alexa Fluor® 488, ab150077), at 1/2000 dilution was used as the secondary antibody.
Cells were stained with rabbit IgG (Left) or ab238140 (Right). Then stained with anti-CD19 conjugated to Alexa Fluor® 647.

Gated on viable cells.

Dot Blot - Anti-Tetraspanin-33 antibody [EPR23121-146] (ab238140)



Dot blot analysis of Tetraspanin-33 labeled with ab238140 at 1/1000 dilution.
Lane 1: Recombinant tetraspanin-33 fragment containing the sequence at the immunogen region.
Lane 2: BSA.

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution was used as secondary antibody.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

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