abcam

ab238421

Anti-SLAMF6 antibody [EPR22170] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR22170
Purification technique	Affinity purification Protein A
Concentration	1.02 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	-

Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

WB

Expected

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

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information SLAMF6

Function

Self-ligand receptor of the signaling lymphocytic activation molecule (SLAM) family. SLAM receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation and interconnection of both innate and adaptive immune response. Activities are controlled by presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2. Triggers cytolytic activity only in natural killer cells (NK) expressing high surface densities of natural cytotoxicity receptors (PubMed:11489943, PubMed:16920955). Positive signaling in NK cells implicates phosphorylation of VAV1. NK cell activation seems to depend on SH2D1B and not on SH2D1A (PubMed:16920955). In conjunction with SLAMF1 controls the transition between positive selection and the subsequent

expansion and differentiation of the thymocytic natural killer T (NKT) cell lineage (By similarity). Promotes T-cell differentiation into a helper T-cell Th17 phenotype leading to increased IL-17 secretion; the costimulatory activity requires SH2D1A (PubMed:16920955, PubMed:22184727). Promotes recruitment of RORC to the IL-17 promoter (PubMed:22989874). In conjunction with SLAMF1 and CD84/SLAMF5 may be a negative regulator of the humoral immune response. In the absence of SH2D1A/SAP can transmit negative signals to CD4(+) T-cells and NKT cells. Negatively regulates germinal center formation by inhibiting T-cell:B-cell adhesion; the function probably implicates increased association with PTPN6/SHP-1 via ITSMs in absence of SH2D1A/SAP. However, reported to be involved in maintaining B-cell tolerance in germinal centers and in preventing autoimmunity (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab238421 is the carrier-free version of ab224201.

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	SLAMF6 also known as CD352 is a protein that functions as a signaling lymphocytic activation molecule. It is a member of the SLAM family and is found on the surface of many immune cells including T cells B cells and natural killer (NK) cells. SLAMF6 has a molecular weight of approximately 71 kDa. This protein plays a role in cell-to-cell adhesion and transduction of activation signals. Its expression appears prominently in lymphoid tissues directing immune responses.
Biological function summary	SLAMF6 assists in modulating immune cell interactions and is part of specific receptor complexes. It influences the activation and proliferation of immune cells and contributes to the maintenance of immune homeostasis. SLAMF6 interacts with signaling pathways involving SAP (SLAM-associated protein) and EAT-2 which facilitate downstream signaling events essential for immune cell function and communication.
Pathways	SLAMF6 integrates within the SLAM receptor signaling pathway impacting the regulation of immune responses. It plays a role in the NF-kB signaling pathway important for inflammatory and immune responses. Related proteins in these pathways include SAP and EAT-2 important in signal transduction cascades that affect cell survival differentiation and function of immune cells.
Associated diseases and disorders	SLAMF6 ties to autoimmune diseases and certain cancers. It is involved in autoimmune conditions such as systemic lupus erythematosus where malfunction in immune regulation occurs. Additionally deregulation of SLAMF6 expression associates with lymphomas impacting cell communication and immune function. In these conditions SLAMF6 interacts with SAP influencing the disease progression through altered immune signaling pathways.

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.

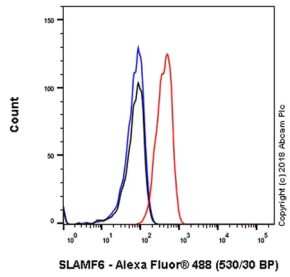
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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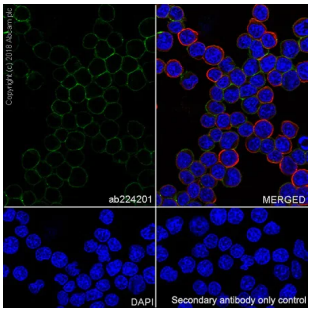
6 product images



Flow Cytometry - Anti-SLAMF6 antibody [EPR22170] - BSA and Azide free (ab238421)

SLAMF6 Flow Cytometry staining using rabbit Anti-SLAMF6 antibody

Flow cytometric analysis of Ramos (human Burkitt's lymphoma cell line) cell line labeling SLAMF6 with ab224201 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells incubated with secondary antibody only) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab224201).



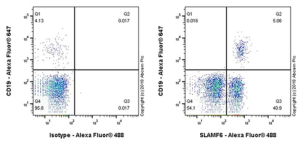
Immunocytochemistry/ Immunofluorescence - Anti-SLAMF6 antibody [EPR22170] - BSA and Azide free (ab238421)

SLAMF6 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-SLAMF6 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Ramos (human Burkitt's lymphoma cell line) cells labeling SLAMF6 with ab224201 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in the Ramos cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

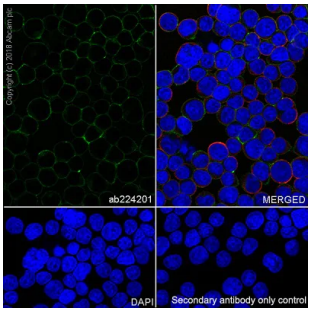
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol and sodium azide (ab224201).



Flow Cytometry - Anti-SLAMF6 antibody [EPR22170] - BSA and Azide free (ab238421)

SLAMF6 Flow Cytometry staining using rabbit Anti-SLAMF6 antibody

Flow cytometric analysis of human peripheral blood mononuclear cell (PBMC) labeling SLAMF6 with ab224201 at 1/500 dilution (right panel) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (left panel). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab224201).



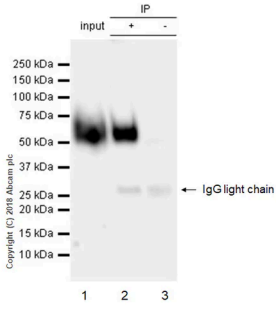
Immunocytochemistry/ Immunofluorescence - Anti-SLAMF6 antibody [EPR22170] - BSA and Azide free (ab238421)

SLAMF6 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-SLAMF6 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Jurkat (human T cell leukemia cell line from peripheral blood) cells labeling SLAMF6 with ab224201 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in the Jurkat cell line.
The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab224201).



Immunoprecipitation - Anti-SLAMF6 antibody [EPR22170] - BSA and Azide free (ab238421)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol and sodium azide (ab224201).
SLAMF6 was immunoprecipitated from 0.35 mg Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate with ab224201 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab224201 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

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

This blot was developed using a high sensitivity ECL substrate. The high-sensitivity ECL substrate used allows for the detection of proteins in the mid-femtogram range.

All lanes:
Immunoprecipitation - Anti-SLAMF6 antibody [EPR22170] (ab224201) at 1/500 dilution

Lane 1:
Jurkat whole cell lysate (input) at 10 µg

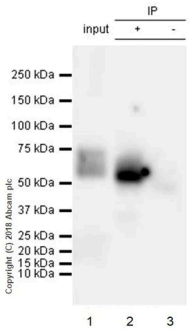
Lane 2:
ab224201 at 1/30 IP in Jurkat whole cell lysate (+) at 10 µg

Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab224201 in Jurkat whole cell lysate (-) at 10 µg

Developed using the ECL technique.

Predicted band size: 37 kDa

Exposure time: 10s



Immunoprecipitation - Anti-SLAMF6 antibody [EPR22170] - BSA and Azide free (ab238421)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab224201).
SLAMF6 was immunoprecipitated from 0.35 mg Ramos (human Burkitt's lymphoma cell line) whole cell lysate with ab224201 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab224201 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1/5000 dilution.

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

This blot was developed using a high sensitivity ECL substrate. The high-sensitivity ECL substrate used allows for the detection of proteins in the mid-femtogram range.

All lanes:
Immunoprecipitation - Anti-SLAMF6 antibody [EPR22170] (ab224201) at 1/1000 dilution

Lane 1:
Ramos whole cell lysate 10 µg (Input) at 10 µg

Lane 2:
ab224201 at 1/30 IP in Ramos whole cell lysate (+) at 10 µg

Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab224201 in Ramos whole cell lysate (-) at 10 µg

Secondary

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

Developed using the ECL technique.

Predicted band size: 37 kDa

Exposure time: 10s

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