abcam

ab242416

Anti-CTAG1B antibody [SP349] - 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	SP349
Purification technique	Affinity purification Protein A/G
Concentration	1.013 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

WB

Expected

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

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information CTAG1A

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

ab242416 is the carrier-free version of ab223498.
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	CTAG1B also known as NY-ESO-1 is a cancer/testis antigen with an approximate molecular mass of 22 kDa. This protein is absent in most normal tissues but shows expression in the testes and a variety of tumors. CTAG1B is recognized for its potential role in immune targeting due to its restricted expression profile. The protein plays a part in antigenic presentation and stimulates T-cell response making it a significant focus for cancer immunotherapy research.
Biological function summary	CTAG1B is involved in the immune response against tumors. It is part of the group called cancer/testis antigens due to its low expression in normal tissues except the testes. This restricted pattern allows CTAG1B to function in distinguishing between tumor and normal cells which is important for targeted therapies. It does not belong to a specific multiprotein complex but contributes to immune recognition by presenting as an antigenic determinant.
Pathways	CTAG1B engages predominantly in cellular processes associated with the immune system's adaptive arm. It plays a role in the antigen processing and presentation pathway where it functions to engage CD8+ T cells. The protein associates with other antigens expressed in cancer such as MAGE-A1 in enabling an immune response against tumor cells. By acting alongside these proteins CTAG1B supports pathways leading to the recognition and destruction of malignant cells.
Associated diseases and disorders	CTAG1B shows a strong connection to cancer particularly in melanoma and ovarian cancer. It is considered a biomarker for these cancers due to its restricted expression and detection in tumor tissues. In cancer CTAG1B interacts with immune checkpoint proteins such as PD-L1 where it helps sustain and enhance immune responses. This relationship has made CTAG1B a promising target in immunotherapy aiming to improve cancer treatment outcomes.

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

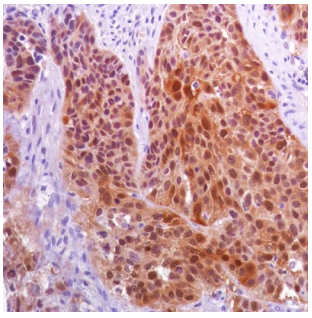
We do not recommend this combination. It is not covered by our product promise.

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.

6 product images

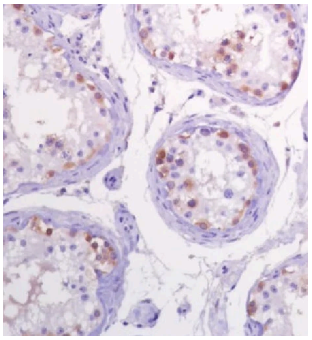


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTAG1B antibody [SP349] - BSA and Azide free (ab242416)

CTAG1B Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CTAG1B antibody

Formalin-fixed, paraffin-embedded human lung squamous cell carcinoma tissue stained for CTAG1B with ab223498 at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab223498)

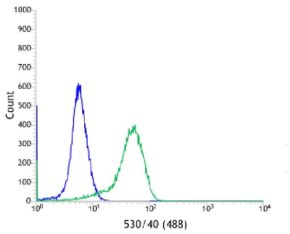


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTAG1B antibody [SP349] - BSA and Azide free (ab242416)

CTAG1B Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CTAG1B antibody

Formalin-fixed, paraffin-embedded human testis tissue stained for CTAG1B using ab223498 at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab223498)

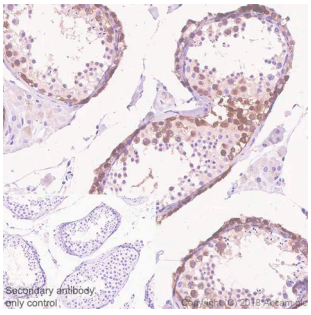


Flow Cytometry - Anti-CTAG1B antibody [SP349] - BSA and Azide free (ab242416)

CTAG1B Flow Cytometry staining using rabbit Anti-CTAG1B antibody

Flow cytometric analysis of ab223498 staining HeLa (human epithelial cell line from cervix adenocarcinoma) cells for CTAG1B (green) at 1/100 dilution compared to negative control of rabbit IgG (blue).

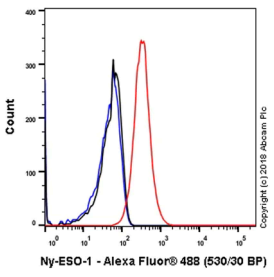
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab223498)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTAG1B antibody [SP349] - BSA and Azide free (ab242416)

CTAG1B Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CTAG1B antibody

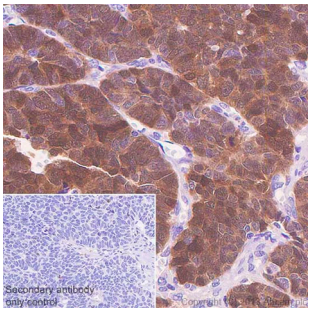
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human testis tissue sections labeling CTAG1B with Purified ab223498 at 1/100 dilution (3.83 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab223498)



Flow Cytometry - Anti-CTAG1B antibody [SP349] - BSA and Azide free (ab242416)

CTAG1B Flow Cytometry staining using rabbit Anti-CTAG1B antibody

Flow Cytometry analysis of NCI-H1299 (human lung carcinoma epithelial cell) cells labeling CTAG1B with purified ab223498 at 1:380 dilution (1.01 µg/ml) - Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, ab150081) secondary antibody was used at 1:2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) - Black. Unlabeled control - Blue.This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab242416)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTAG1B antibody [SP349] - BSA and Azide free (ab242416)

CTAG1B Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CTAG1B antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human gastric carcinoma tissue sections labeling CTAG1B with Purified ab223498 at 1/100 dilution (3.83 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with

sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Goat Anti-Rabbit & Mouse IgG (HRP) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab223498)

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