abcam

ab328564

Alexa Fluor® 488 Anti-HVEM antibody [CW10]

Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.1% Sodium azide Constituents: PBS, 0.2% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human TNFRSF14. Database link Q92956
Clone number	CW10
Purification technique	Size-exclusion chromatography
Specificity	The mouse monoclonal antibody CW10 recognizes an extracellular epitope on CD270, a type I transmembrane protein expressed on resting T cells, monocytes, and immature dendritic cells.
Light chain type	kappa

Reactivity data

Flow Cyt

Tested

Species	Human

Dilution info	-
Notes	Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Target data

See full target information TNFRSF14

Function	Receptor for four distinct ligands: The TNF superfamily members TNFSF14/LIGHT and homotrimeric LTA/lymphotoxin-alpha and the immunoglobulin superfamily members BTLA and CD160, altogether defining a complex stimulatory and inhibitory signaling network (PubMed:10754304, PubMed:18193050, PubMed:23761635, PubMed:9462508). Signals via the TRAF2-TRAF3 E3 ligase pathway to promote immune cell survival and differentiation (PubMed:19915044, PubMed:9153189, PubMed:9162022). Participates in bidirectional cell-cell contact signaling between antigen presenting cells and lymphocytes. In response to ligation of TNFSF14/LIGHT, delivers costimulatory signals to T cells, promoting cell proliferation and effector functions (PubMed:10754304). Interacts with CD160 on NK cells, enhancing IFNG production and anti-tumor immune response (PubMed:23761635). In the context of bacterial infection, acts as a signaling receptor on epithelial cells for CD160 from intraepithelial lymphocytes, triggering the production of antimicrobial proteins and pro-inflammatory cytokines (By similarity). Upon binding to CD160 on activated CD4+ T cells, down-regulates CD28 costimulatory signaling, restricting memory and alloantigen-specific immune response (PubMed:18193050). May interact in cis (on the same cell) or in trans (on other cells) with BTLA (By similarity) (PubMed:19915044). In cis interactions, appears to play an immune regulatory role inhibiting in trans interactions in naive T cells to maintain a resting state. In trans interactions, can predominate during adaptive immune response to provide survival signals to effector T cells (By similarity) (PubMed:19915044). (Microbial infection) Acts as a receptor for Herpes simplex virus 1/HHV-1. (Microbial infection) Acts as a receptor for Herpes simplex virus 2/HHV-2.

Storage

Shipped at conditions	Ambient - Can Ship with Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

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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

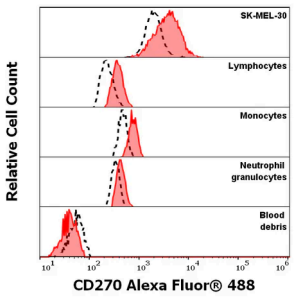
We do not recommend this combination. It is not covered by our product promise.

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:
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2 product images



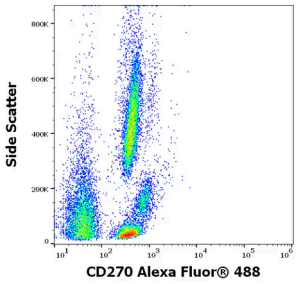
Flow Cytometry - Alexa Fluor® 488 Anti-HVEM antibody [CW10] (ab328564)

HVEM Flow Cytometry staining using mouse Anti-HVEM antibody

Anti-Hu CD270 Alexa Fluor® 488 antibody (clone CW10) specificity verification by flow cytometry

Anti-Hu CD270 Alexa Fluor® 488 antibody (concentration in sample 0.56 µg/ml, red-filled histogram) binds specifically to CD270 on surface of SK-MEL-30 cells (upper panel) and also main leukocyte subpopulations - neutrophil granulocytes, monocytes, lymphocytes (middle panels), but not to surface of blood debris including thrombocytes (lower panel). Level of non-specific binding was assessed using Mouse IgG1 isotype control Alexa Fluor® 488 antibody (MOPC-21) under same conditions (concentration in sample 0.56 µg/ml, black-dashed histogram).

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HVEM Flow Cytometry staining of human peripheral whole blood using mouse Anti-HVEM antibody

Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD270 (CW10) Alexa Fluor® 488 antibody (concentration in sample 0.56 µg/ml).

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