abcam

Product datasheet

Anti-CD147 antibody [MEM-M6/6] - Low endotoxin, Azide free ab119114

2 Images

Overview

Product name	Anti-CD147 antibody [MEM-M6/6] - Low endotoxin, Azide free
Description	Mouse monoclonal [MEM-M6/6] to CD147 - Low endotoxin, Azide free
Host species	Mouse
Specificity	ab119114 recognizes Ig domain D2 (membrane proximal) of CD147(Neurothelin).
Tested applications	**Suitable for:** ICC/IF, WB, Functional Studies, Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Protein A-CR purified soluble recombinant Human CD147 (consisting of the CDNA encoding the hinge region, CH2-and CH3 domain of Human IgG1).
Positive control	293 Human fibroblastoid cell line.
General notes	Endotoxin level is less than 10 EU/mg of the protein, as determined by the LAL test.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Constituent: 99% PBS Note: Azide-free PBS
Purity	Protein A purified
Purification notes	ab119114 is Purified from hybridoma culture supernatant by protein-A affinity chromatography. Purity is > 95% (by SDS-PAGE), 0.2 µm filter sterilized.
Clonality	Monoclonal
Clone number	MEM-M6/6
Isotype	IgG1

Applications

Our Abpromise guarantee covers the use of **ab119114** in the following tested applications.

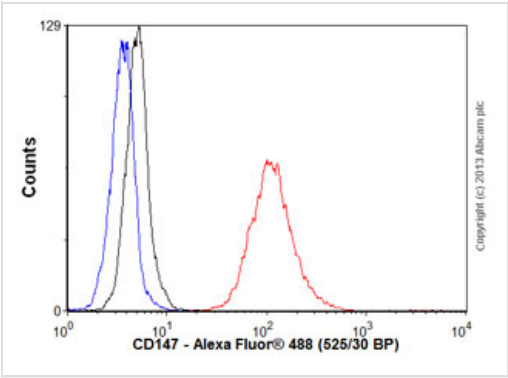
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 10 µg/ml.
WB		Use at an assay dependent concentration. Use under non reducing condition. Predicted molecular weight: 42 kDa.
Functional Studies		Use at an assay dependent concentration.
Flow Cyt		Use 1µg for 10^6 cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

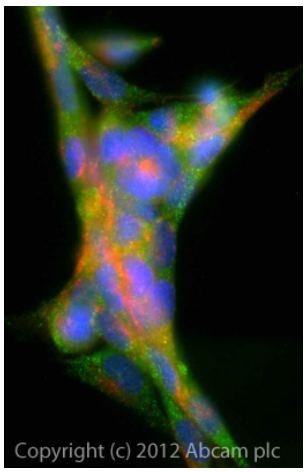
Function	Plays pivotal roles in spermatogenesis, embryo implantation, neural network formation and tumor progression. Stimulates adjacent fibroblasts to produce matrix metalloproteinases (MMPS). May target monocarboxylate transporters SLC16A1, SLC16A3 and SLC16A8 to plasma membranes of retinal pigment epithelium and neural retina. Seems to be a receptor for oligomannosidic glycans. In vitro, promotes outgrowth of astrocytic processes.
Tissue specificity	Present only in vascular endothelium in non-neoplastic regions of the brain, whereas it is present in tumor cells but not in proliferating blood vessels in malignant gliomas.
Sequence similarities	Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
Post-translational modifications	N-glycosylated.
Cellular localization	Cell membrane. Melanosome. Colocalizes with SLC16A1 and SLC16A8 (By similarity). Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



Flow Cytometry - Anti-CD147 antibody [MEM-M6/6] - Low Endotoxin (ab119114)

Human peripheral blood lymphocytes stained with ab119114 (red line). Human whole blood was processed using a modified protocol based on Chow *et al*, 2005 (PMID: 16080188). In brief, human whole blood was fixed in 4% formaldehyde (methanol-free) for 10 min at 22°C. Red blood cells were then lyzed by the addition of Triton X-100 (final concentration - 0.1%) for 15 min at 37°C. For experimentation, cells were treated with 50% methanol (-20°C) for 15 min at 4°C. Cells were then incubated with the antibody (ab119114, 1µg/1x10^6 cells) for 30 min at 4°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 4°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >30,000 total events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. Gating strategy - peripheral blood lymphocytes.



Immunocytochemistry/ Immunofluorescence - Anti-CD147 antibody [MEM-M6/6] - Low Endotoxin (ab119114)

ICC/IF image of ab119114 stained SV40 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab119114, 10µg/ml) overnight at +4°C. The secondary antibody (green) was ab96879, DyLight® 488 goat anti-mouse IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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