

Product datasheet

Anti-CD147 antibody [8D6] ab194401

KO VALIDATED

2 Images

Overview

Product name	Anti-CD147 antibody [8D6]
Description	Mouse monoclonal [8D6] to CD147
Host species	Mouse
Specificity	ab194401 recognizes extracellular epitope 2 within the N-terminal Ig domain of human CD147.
Tested applications	Suitable for: IP, ICC/IF, IHC-Fr, IHC-P, Flow Cyt, WB
Species reactivity	Reacts with: Human
Immunogen	Tissue, cells or virus corresponding to Human CD147. Human T cell line Molt 13 Database link: P35613
Positive control	IHC-P: Human renal cell carcinoma tissue. Flow Cyt: A549 cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.05% BSA, 99% PBS
Purity	Protein G purified
Purification notes	Purified from bioreactor concentrate.
Clonality	Monoclonal
Clone number	8D6

Isotype

IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab194401 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
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
IHC-P		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt		Use 0.5-1µl for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 42 kDa. Actual Band: 35kDa (non-reduced); 40kDa (reduced).

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.

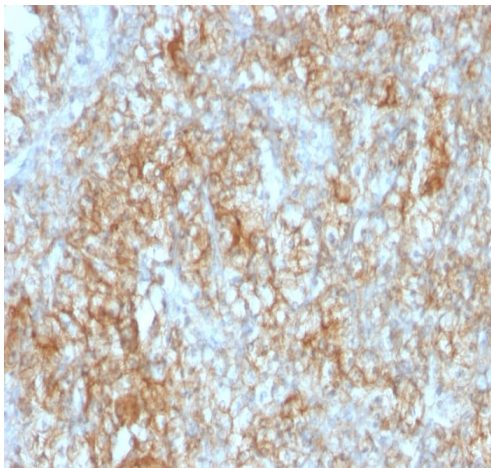
Post-translational modifications

N-glycosylated.

Cellular localization

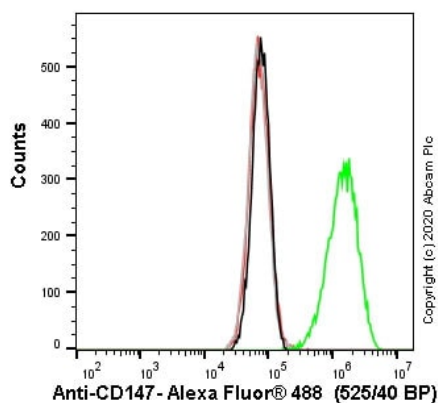
Cell membrane. Melanosome. Colocalizes with SLC16A1 and SLC16A8 (By similarity). Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD147 antibody [8D6] (ab194401)

Formalin-fixed, paraffin-embedded human renal cell carcinoma tissue stained for CD147 using ab194401 at 2 µg/ml in immunohistochemical analysis.



Flow Cytometry - Anti-CD147 antibody [8D6] (ab194401)

Flow cytometry overlay histogram showing wild-type A549 (green line) and BSG knockout A549 cells ([ab273748](#)) stained with ab194401 (red line). The cells were incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab194401) (1x10⁶ in 100µl at 10 µg/ml) for 30 min at 4°C.

The secondary antibody Goat anti-mouse IgG H&L (Alexa Fluor® 488, pre-adsorbed) ([ab150117](#)) was used at 1/2000 for 30 min at 4°C.

Isotype control antibody was mouse IgG1κ ([ab170190](#)) used at the same concentration and conditions as the primary antibody (wild-type A549 - black line; BSG knockout A549 - grey line). Unlabelled sample was also used as a control (this line is not shown for the purpose of simplicity).

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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