abcam

Product datasheet

Recombinant human CD47 protein (Fc Chimera Active) ab220559

5 Images

Description

Product name Recombinant human CD47 protein (Fc Chimera Active)

Biological activity Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human SIRP

alpha protein (ab174006) at 2 μg/mL (100 μL/well) can bind Recombinant human CD47 protein

(ab220559) with a linear range of 1-31 ng/mL.

Measured by its binding ability in FACS. The binding of Recombinant human CD47 protein (ab220559) to ACHN expressing SIRP-a was inhibited by increasing concentration of neutralizing

SIRP-a antibody. The concentration of ab220559 used is 10 μ g/mL. IC50=8.39 μ g/mL.

Measured by its binding ability in FACS. Human CD47, Mouse IgG2a Fc Tag, low endotoxin (ab220559) can bind to ACHN cell expressing human SIRP-a. The concentration of CD47 used is

10 μg/mL.

Measured by its binding ability in a BLI assay. Loaded Recombinant human CD47

protein (ab220559) on Protein A Biosensor, can bind Recombinant Human SIRP alpha protein

(ab174006) with an affinity constant of 1.1 μ M.

Purity > 95 % SDS-PAGE.

Endotoxin level < 1.000 Eu/µg

Expression system HEK 293 cells

Accession Q08722-3

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human

Sequence QL LFNKTKSVEF TFCNDTVVIP CFVTNMEAQN

TTEVYVKWKF KGRDIYTFDG ALNKSTVPTD FSSAKIEVSQ LLKGDASLKM DKSDAVSHTG NYTCEVTELT REGETIIELK YRVVSWFSP

Predicted molecular weight 41 kDa including tags

Amino acids 19 to 139

Tags Fc tag C-Terminus

Additional sequence information This protein carries a mouse IgG2a Fc tag ((Glu 98-Lys 330) P01863) at the C-terminus

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(NP_942088).

Specifications

Our Abpromise quarantee covers the use of ab220559 in the following tested applications.

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

Applications Functional Studies

SDS-PAGE

Flow Cytometry

ELISA

Form Lyophilized

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at 4°C (stable for up to 12 months). Store at -20°C or -80°C. Avoid freeze /

thaw cycle. Working aliquots stored with a carrier protein are stable for at least 3 months at -20°C

to -80°C..

pH: 7.4

Constituents: 0.61% Tris, 0.75% Glycine, 5% Trehalose

Lyophilized from 0.22 µm filtered solution.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution Reconstitute with sterile deionized water to a concentration of 400 μg/ml.

General Info

Function Has a role in both cell adhesion by acting as an adhesion receptor for THBS1 on platelets, and in

the modulation of integrins. Plays an important role in memory formation and synaptic plasticity in the hippocampus (By similarity). Receptor for SIRPA, binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. Interaction with

SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation. May play a role in membrane transport and/or integrin dependent signal transduction. May prevent premature elimination of red blood cells. May

be involved in membrane permeability changes induced following virus infection.

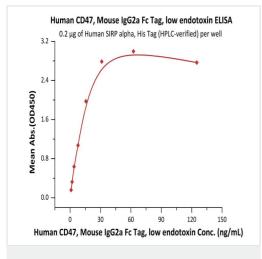
Tissue specificity Very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially

abundant in some epithelia and the brain.

Sequence similarities Contains 1 lg-like V-type (immunoglobulin-like) domain.

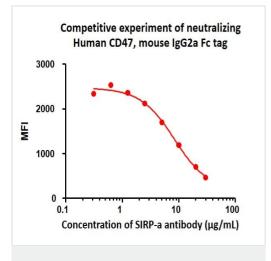
Cellular localization Cell membrane.

Images



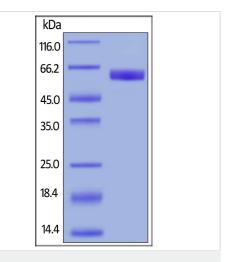
Immobilized Recombinant Human SIRP alpha protein ($\underline{ab174006}$) at 2 μ g/mL (100 μ L/well) can bind Recombinant human CD47 protein ($\underline{ab220559}$) with a linear range of 1-31 ng/mL.





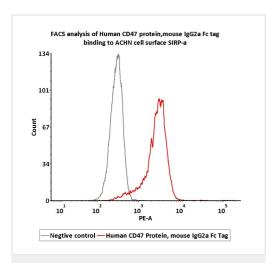
Biological activity - Recombinant human CD47 protein (Fc Chimera Active) (ab220559)

FACS analysis shows that the binding of Recombinant human CD47 protein (ab220559) to ACHN expressing SIRP-a was inhibited by increasing concentration of neutralizing SIRP-a antibody. The concentration of ab220559 used is 10 μ g/mL. IC50=8.39 μ g/mL.



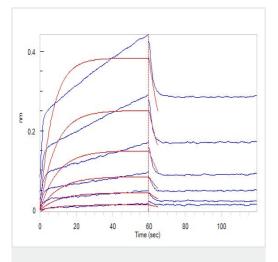
ELISA - Recombinant human CD47 protein (Fc Chimera Active) (ab220559)

SDS-PAGE of reduced ab220559 stained overnight with Coomassie Blue. The protein migrates as 55-66 kDa due to glycosylation.



Biological activity - Recombinant human CD47 protein (Fc Chimera Active) (ab220559)

FACS assay shows that Recombinant human CD47 protein (ab220559) can bind to ACHN cell expressing human SIRP-a. The concentration of ab220559 used is 10 μ g/mL.



Biological activity - Recombinant human CD47 protein (Fc Chimera Active) (ab220559)

Loaded Recombinant human CD47 protein (ab220559) on Protein A Biosensor, can bind Recombinant Human SIRP alpha protein (ab174006) with an affinity constant of 1.1 μ M as determined in BLI assay.

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