# abcam

# Product datasheet

# Recombinant human CD47 protein (Fc Chimera Active) ab220587

# 画像数6

#### 製品の詳細

製品名 Recombinant human CD47 protein (Fc Chimera Active)

生理活性 Measured by its binding ability in a functional ELISA. Immobilized ab220587 at 2 μg/mL (100

μL/well) can bind Human SIRP alpha, His Tag with a linear range of 0.016-0.5 μg/mL.

精製度 > 95 % SDS-PAGE.

>90% as determined by SEC-MALS.

**エンドトキシン・レベル** < 1.000 Eu/μg **発現系** HEK 293 cells

アクセッション番号 <u>Q08722-3</u>

タンパク質長 Protein fragment

Animal free No

**由来** Recombinant

生物種 Human

配列 QLLFNKTKSVEFTFCNDTVVIPCFVTNMEAQNTTEVYVKWKF

KGRDIYTF

DGALNKSTVPTDFSSAKIEVSQLLKGDASLKMDKSDAVSHTG

NYTCEVTE LTREGETIIELKYRVVSWFSP

予測される分子量 40 kDa including tags

**領域** 19 to 139

タグ Fc tag C-Terminus

配列の追加情報 Fused with a human lgG1 Fc tag (Pro 100 - Lys 330; P01857) at the C-terminus (NP\_942088).

#### 特性

Our Abpromise guarantee covers the use of ab220587 in the following tested applications.

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

アプリケーション Functional Studies

SDS-PAGE

Flow Cytometry

#### 前処理および保存

#### 保存方法および安定性

Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

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.

#### 再構成

Reconstitute with sterile deionized water to a concentration of 1 mg/ml.

#### 関連情報

#### 機能

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.

#### 組織特異性

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

abundant in some epithelia and the brain.

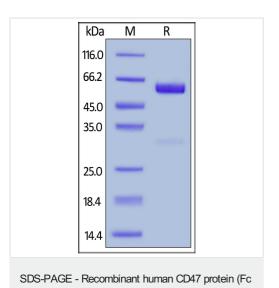
## 配列類似性

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

#### 細胞内局在

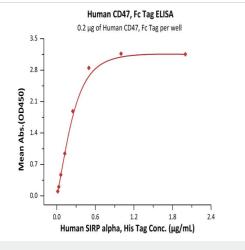
Cell membrane.

#### 画像



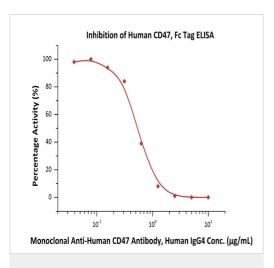
Chimera Active) (ab220587)

Human CD47 (Fc Tag) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

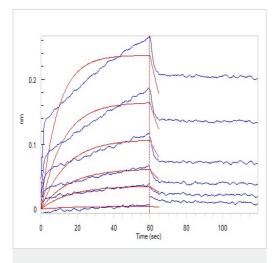


Functional Studies - Recombinant human CD47 protein (Fc Chimera Active) (ab220587)

Immobilized ab220587 at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human SIRP alpha, His Tag (HPLC-verified) with a linear range of 0.016-0.5  $\mu$ g/mL.

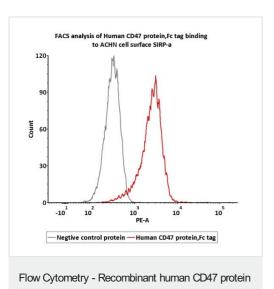


ELISA - Recombinant human CD47 protein (Fc Chimera Active) (ab220587) Serial dilutions of Anti-Human CD47 Neutralizing Antibody were added into Human CD47, Fc Tag (HPLC-verified) (ab220587): Biotinylated Human SIRP alpha, Fc,Avitag (ab246052) binding reactions. The half maximal inhibitory concentration (IC50) is  $0.5431~\mu g/mL$ 



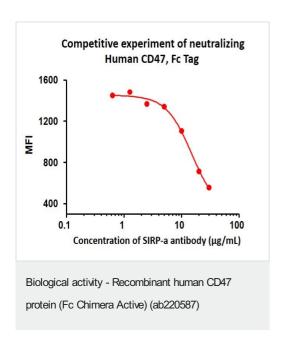
Biological activity - Recombinant human CD47 protein (Fc Chimera Active) (ab220587)

Loaded Recombinant human CD47 protein (Fc Chimera Active) (ab220587) on Protein A Biosensor, can bind Human SIRP alpha, His Tag (HPLC-verified) (ab174006) with an affinity constant of 1.1  $\mu$ M as determined in BLI assay



(Fc Chimera Active) (ab220587)

FACS assay shows that ab220587 can bind to ACHN cell expressing SIRP-a. The concentration of CD47 used is 10 µg/mL.



FACS analysis shows that the binding of Human CD47 to ACHN expressing SIRP-a was inhibited by increasing concentration of neutralizing SIRP-a antibody. The concentration of Human CD47 used is 10  $\mu$ g/mL. IC50=8.39  $\mu$ g/mL

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