

## Product datasheet

# Recombinant human CD47 protein (Active) ab174029

1 References 6 Images

### Description

<b>Product name</b>	Recombinant human CD47 protein (Active)	
<b>Biological activity</b>	<p>Measured by its binding ability in a functional ELISA.</p> <p>When Recombinant Human CD172a / SIRP alpha Fc Chimera is coated at 1 µg/mL, ab174029 binds with apparent KD &lt; 1 nM.</p>	
<b>Purity</b>	<p>&gt; 95 % SDS-PAGE.</p> <p>Purified by Immobilized metal affinity chromatography.</p>	
<b>Endotoxin level</b>	< 1.000 Eu/µg	
<b>Expression system</b>	HEK 293 cells	
<b>Accession</b>	<a href="#">Q08722</a>	
<b>Protein length</b>	Protein fragment	
<b>Animal free</b>	No	
<b>Nature</b>	Recombinant	
<b>Species</b>	Human	
<b>Sequence</b>	<p>QLLFNKTKSVEFTFCNDTVVIPCFTVNMEAQNTTEVYVKW</p> <p>KFKGRDIYTF</p> <p>DGALNKSTVPTDFSSAKIEVSQLLKGDASLKMDKSDAVS</p> <p>HTGNYTCEVTE LTREGETIIEELKYRVVSWFSP</p>	
<b>Predicted molecular weight</b>	16 kDa including tags	
<b>Amino acids</b>	19 to 139	
<b>Tags</b>	His tag C-Terminus	

### Specifications

Our [Abpromise guarantee](#) covers the use of **ab174029** in the following tested applications.

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

<b>Applications</b>	<p>ELISA</p> <p>Functional Studies</p> <p>SDS-PAGE</p>
<b>Form</b>	Lyophilized
<b>Additional notes</b>	After reconstitution, store under sterile conditions for 1 month at 4°C - 8°C or 3 months at -20°C to

-80°C.

## Preparation and Storage

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### Stability and Storage

Shipped at 4°C. Store at 4°C prior to reconstitution. Store at -20°C or -80°C. Avoid freeze / thaw cycle. For long term storage it is recommended to add a carrier protein on reconstitution (0.1% HSA or BSA).

pH: 7.40

Constituents: PBS, 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 200 µg/ml.

## General Info

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### 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

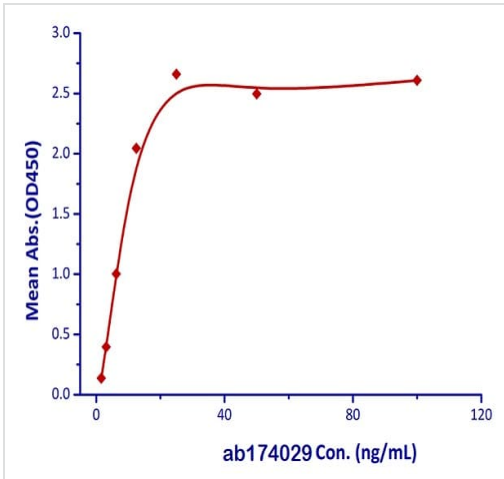
Contains 1 Ig-like V-type (immunoglobulin-like) domain.

### Cellular localization

Cell membrane.

## Images

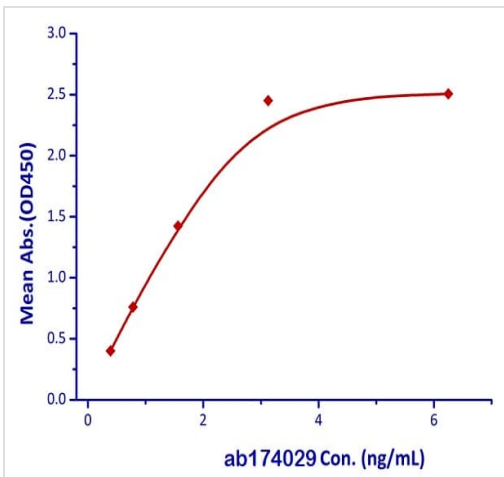
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Immobilized [ab221235](#) at 5 µg/mL (100 µL/well) binds ab174029.

Linear range: 2-13 ng/mL (QC tested).

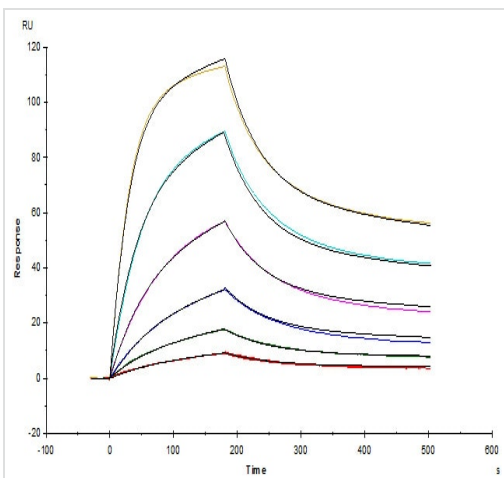
ELISA - Recombinant human CD47 protein (Active)  
(ab174029)



Immobilized Anti-CD47 MAb, Human IgG4 (clone 5F9) at 2 µg/mL (100 µL/well) binds ab174029.

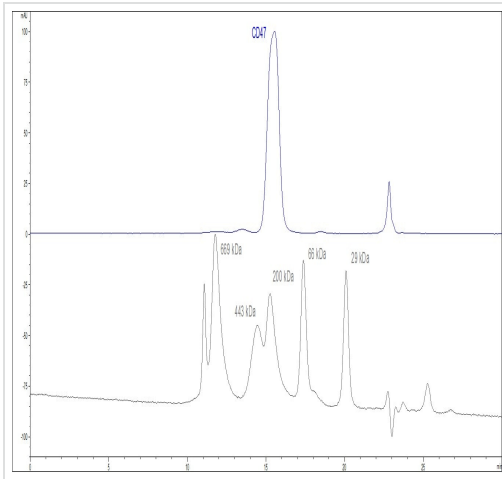
Linear range: 0.4-3 ng/mL (Routinely tested).

ELISA - Recombinant human CD47 protein (Active)  
(ab174029)



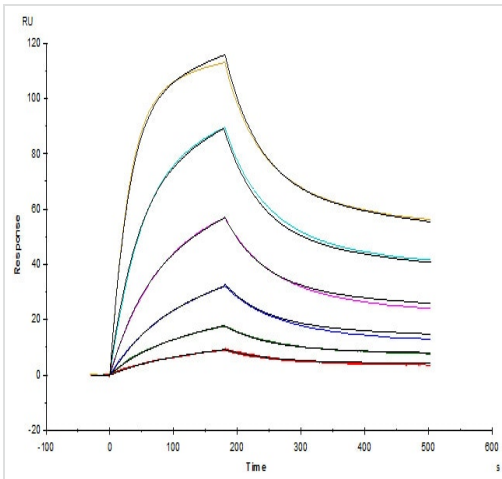
Anti-Human CD47 MAb (Human IgG4) captured on CM5 chip via Anti-Human IgG Fc antibodies surface can bind Human CD47 (His Tag) with an affinity constant of 1.66 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

Functional Studies - Recombinant human CD47 protein (Active) (ab174029)



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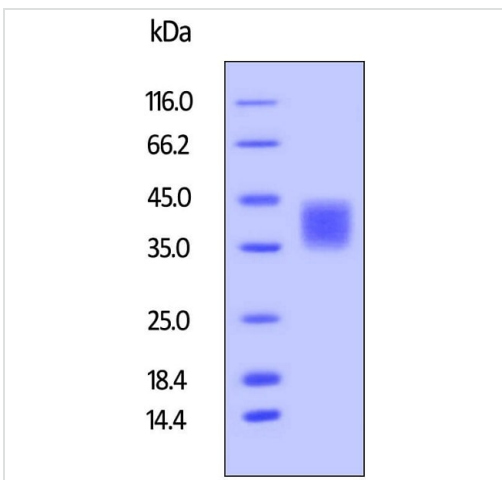
Immobilized Human SIRP alpha (Fc Tag) (HPLC-verified) at 5 µg/mL (100 µL/well) can bind Human CD47 (His Tag) with a linear range of 6-50 ng/mL (QC tested).



Functional Studies - Recombinant human CD47 protein (Active) (ab174029)

Anti-Human CD47 MAb (Human IgG4) captured on CM5 chip via Anti-Human IgG Fc antibodies surface, binds ab174029.

Affinity constant: 1.66 nM as determined in a SPR assay (Biacore T200) (Routinely tested).



SDS-PAGE - Recombinant human CD47 protein (Active) (ab174029)

Reduced ab174029 on SDS-PAGE, stained overnight with Coomassie Blue.

Purity of protein > 95%

The protein migrates as 35-45 kDa under reducing condition due to glycosylation.

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

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