abcam

Product datasheet

Recombinant human CD44 protein (Active) ab221334

4 Images

Description

Product name Recombinant human CD44 protein (Active)

Biological activity Measured by its binding ability in a functional ELISA. Immobilized ab221334 at 5 μg/mL

(100 µL/well) can bind Hyaluronan biotin sodium salt with a linear range of 10-156 ng/mL.

Measured by its binding ability in a functional ELISA. Immobilized Hyaluronic Acid at 100 μg/mL

(100 μ L/well) can bind ab221334 with a linear range of 0.156-2.5 μ g/mL.

Purity > 95 % SDS-PAGE.

>90% as determined by SEC-HPLC.

Endotoxin level < 1.000 Eu/µg
Expression system HEK 293 cells

Accession P16070

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Human

Sequence QIDLNITCRF AGVFHVEKNG RYSISRTEAA DLCKAFNSTL

PTMAQMEKAL SIGFETCRYG FIEGHVVIPR IHPNSICAAN

NTGVYILTSN TSQYDTYCFN ASAPPEEDCT

SVTDLPNAFD GPITITIVNR DGTRYVQKGE YRTNPEDIYP

SNPTDDDVSS GSSSERSSTS GGYIFYTFST
VHPIPDEDSP WITDSTDRIPP KSCDKTHTCP
PCPAPELLGG PSVFLFPPKP KDTLMISRTP
EVTCVVVDVS HEDPEVKFNW YVDGVEVHNA
KTKPREEQYN STYRVVSVLT VLHQDWLNGK
EYKCKVSNKA LPAPIEKTIS KAKGQPREPQ
VYTLPPSRDE LTKNQVSLTC LVKGFYPSDI
AVEWESNGQP ENNYKTTPPV LDSDGSFFLY
SKLTVDKSRW QQGNVFSCSV MHEALHNHYT

QKSLSLSPGK

Predicted molecular weight 49 kDa including tags

Amino acids 21 to 220

Tags Fc tag C-Terminus

Additional sequence information ab221334 has a Human lgG1 Fc tag (Uniprot# P01857, aa 110-330) at the C-terminus.

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Specifications

Our Abpromise guarantee covers the use of ab221334 in the following tested applications.

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

Applications ELISA

HPLC

SDS-PAGE

Form Lyophilized

Additional notes No activity loss is observed after storage at:

-20 to -70°C for 12 months in lyophilized state;

-70°C for 3 months under sterile conditions after reconstitution.

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at -80°C. Avoid freeze / thaw cycle.

pH: 7.4

Constituents: 0.61% Tris, Glycine, Trehalose, L-Arginine, Sodium chloride

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

Function Receptor for hyaluronic acid (HA). Mediates cell-cell and cell-matrix interactions through its affinity

for HA, and possibly also through its affinity for other ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell migration, tumor growth and progression. Also involved in lymphocyte activation, recirculation and homing, and in hematopoiesis. Altered expression or dysfunction causes numerous pathogenic

phenotypes. Great protein heterogeneity due to numerous alternative splicing and post-

translational modification events.

Tissue specificity Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by

carcinomas. Expression is repressed in neuroblastoma cells.

Sequence similarities Contains 1 Link domain.

Domain The lectin-like LINK domain is responsible for hyaluronan binding.

Post-translational Proteolytically cleaved in the extracellular matrix by specific proteinases (possibly MMPs) in

modifications several cell lines and tumors.

N-glycosylated.

 $\hbox{O-glycosylated; contains more-or-less-sulfated chondroitin sulfate glycans, whose number \, may}$

affect the accessibility of specific proteinases to their cleavage site(s).

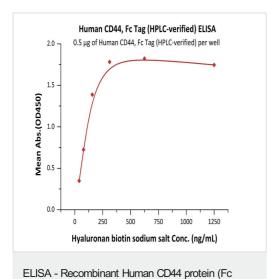
Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive

phosphorylation site), and the phosphorylation of Ser-672.

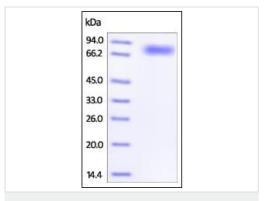
Cellular localization Membrane.

Images

Chimera) (ab221334)

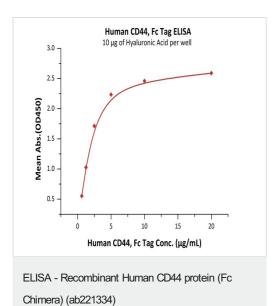


lmmobilized ab221334 at 5 μ g/mL (100 μ L/well) can bind Hyaluronan biotin sodium salt with a linear range of 10-156 η mL.

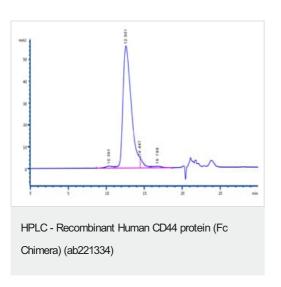


SDS-PAGE - Recombinant Human CD44 protein (Fc Chimera) (ab221334)

SDS-PAGE of reduced ab221334 stained overnight with Coomassie Blue. Due to glycosylation, the protein migrates at 76 kDa on a under reducing conditions.



lmmobilized Hyaluronic Acid at 100 μ g/mL (100 μ L/well) can bind ab221334 with a linear range of 0.156-2.5 μ g/mL.



SEC-HPLC analysis of ab221334. The purity of ab221334 was determined to be greater than 90%.

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