abcam

Product datasheet

Recombinant mouse TRAP/CD40L protein (Active) ab220551

1 References 3 Images

Description

Product name Recombinant mouse TRAP/CD40L protein (Active)

Biological activity Measured by its binding ability in a functional ELISA against immobilized Mouse CD40, Fc Tag

(0.2 µg/well). The linear range is 9-78 ng/ml.

Purity > 95 % SDS-PAGE.

>95% as determined by SDS-PAGE. >95% as determined by SEC-MALS.

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

Accession P27548

Protein length Protein fragment

Animal free No

Nature Recombinant

Species Mouse

Sequence GDEDPQIAAHVVSEANSNAASVLQWAKKGYYTMKSNLVM

LENGKQLTVKR

EGLYYVYTQVTFCSNREPSSQRPFIVGLWLKPSSGSERILL

KAANTHSSS

QLCEQQSVHLGGVFELQAGASVFVNVTEASQVIHRVGFS

SFGLLKL

Predicted molecular weight 17 kDa including tags

Amino acids 115 to 260

Tags His tag N-Terminus

Specifications

Our Abpromise quarantee covers the use of ab220551 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

HPLC

ELISA

Form Lyophilized

Additional notes This product is stable after storage at:

-20°C 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. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. Please

see notes section.

pH: 7.40

Constituents: 95% 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

Function Mediates B-cell proliferation in the absence of co-stimulus as well as IgE production in the

presence of IL-4. Involved in immunoglobulin class switching.

Release of soluble CD40L from platelets is partially regulated by GP Ilb/Illa, actin polymerization,

and an matrix metalloproteinases (MMP) inhibitor-sensitive pathway.

Tissue specificity Specifically expressed on activated CD4+ T-lymphocytes.

Involvement in disease Defects in CD40LG are the cause of X-linked immunodeficiency with hyper-lgM type 1 (HIGM1)

[MIM:308230]; also known as X-linked hyper IgM syndrome (XHIM). HIGM1 is an immunoglobulin isotype switch defect characterized by elevated concentrations of serum IgM and decreased amounts of all other isotypes. Affected males present at an early age (usually within the first year of life) recurrent bacterial and opportunistic infections, including Pneumocystis carinii pneumonia and intractable diarrhea due to cryptosporidium infection. Despite substitution treatment with intravenous immunoglobulin, the overall prognosis is rather poor, with a death rate of about 10%

before adolescence.

Sequence similaritiesBelongs to the tumor necrosis factor family.

Post-translational modifications

The soluble form derives from the membrane form by proteolytic processing.

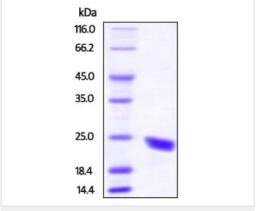
N-linked glycan is a mixture of high mannose and complex type. Glycan structure does not

influence binding affinity to CD40.

Not O-glycosylated.

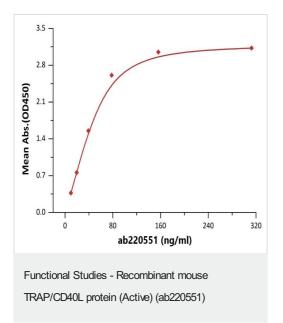
Cellular localization Secreted and Cell membrane.

Images



Coomassie Blue.

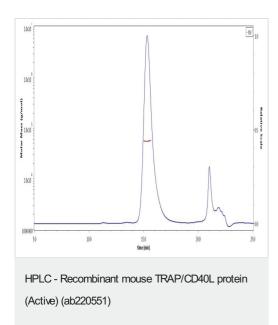
SDS-PAGE - Recombinant mouse TRAP/CD40L protein (Active) (ab220551)



Immobilized Mouse CD40, Fc Tag at 2 μ g/ml (100 μ l/well) can bind ab220551 with a linear range of 9-78 ng/ml.

SDS-PAGE analysis of ab220551 stained overnight with

The reduced protein migrates as 21-25 kDa in SDS-PAGE.



A SEC-HPLC analysis showing over 95% of ab220551 present as active trimers with a molecular mass of around 50-65 kDa.

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

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