abcam

Product datasheet

Mouse CD40L ELISA Kit ab119517

4 References 1 Image

Overview

Precision

Product name Mouse CD40L ELISA Kit

Detection methodColorimetric

Sample	n	Mean	SD	CV%
Overall	8			6.5%

Inter-assay

Intra-assav

Sample	n	Mean	SD	CV%
Overall	8			11.1%

Sample type Cell culture supernatant, Serum

Assay type Sandwich (quantitative)

Sensitivity 0.14 ng/ml

Range 0.31 ng/ml - 20 ng/ml

Recovery 94 %

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Mouse

Product overview Abcam's CD40L Mouse in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for

accurate quantitative measurement of Mouse CD40L concentrations in cell culture supernatant

and serum.

CD40L specific antibodies have been precoated onto 96-well plates. Standards and test samples are added to the wells along with a biotin-conjugated CD40L detection antibody then incubated at room temperature. Following washing, a Streptavidin-HRP conjugate is added to each well, incubated at room temperature and washed. TMB is added and then catalyzed by HRP to produce a blue product that changes to yellow after the addition of acidic stop solution. The density of yellow coloration is directly proportional to the amount of CD40L captured on the plate.

Platform Microplate

Dronartice

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Storage instructions

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
20X Assay Buffer Concentrate	1 x 5ml
20X Wash Buffer Concentrate	1 x 50ml
Adhesive Films	4 units
Biotin-Conjugate anti-mouse CD40L monoclonal antibody	1 x 70µl
Microplate coated with monoclonal antibody to mouse CD40L (12 x 8 wells)	1 unit
Mouse CD40L Standard lyophilized (40 ng /mL upon reconstitution)	2 vials
Sample Diluent	1 x 12ml
Stop Solution (1M Phosphoric acid)	1 x 15ml
Streptavidin-HRP	1 x 150µl
TMB Substrate Solution	1 x 15ml

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.

 $Release\ of\ soluble\ CD40L\ from\ platelets\ is\ partially\ regulated\ by\ GP\ IIb/IIIa,\ actin\ polymerization,$

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 lgM syndrome (XHIM). HIGM1 is an immunoglobulin isotype switch defect characterized by elevated concentrations of serum lgM 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 similarities

Belongs 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

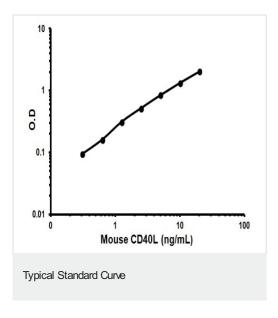
influence binding affinity to CD40.

Not O-glycosylated.

Cellular localization

Secreted and Cell membrane.

Images



Representative Standard Curve using ab119517.

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