

Human CD40L ELISA Kit ab99991

3 References 2 Images

Overview

Product name	Human CD40L ELISA Kit
Detection method	Colorimetric
Sample type	Cell culture supernatant, Serum, Plasma
Assay type	Sandwich (quantitative)
Sensitivity	< 6 pg/ml
Range	8.23 pg/ml - 6000 pg/ml
Recovery	95 %

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	96.35	86% - 105%
Serum	93.57	83% - 103%
Plasma	94.63	84% - 105%

Assay duration	Multiple steps standard assay
Species reactivity	Reacts with: Human
Product overview	Human CD40L ELISA Kit (ab99991) is an <i>in vitro</i> enzyme-linked immunosorbent assay for the quantitative measurement of Human CD40L in serum, plasma (EDTA or heparin), and cell culture supernatants.

This assay employs an antibody specific for Human CD40L coated on a 96-well plate. Standards and samples are pipetted into the wells and CD40L present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human CD40L antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of CD40L bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Get results in 90 minutes with Human CD40 Ligand ELISA Kit (TNFSF5) (**ab196268**) from our SimpleStep ELISA® range.

Notes	Optimization may be required with urine samples.
Platform	Microplate

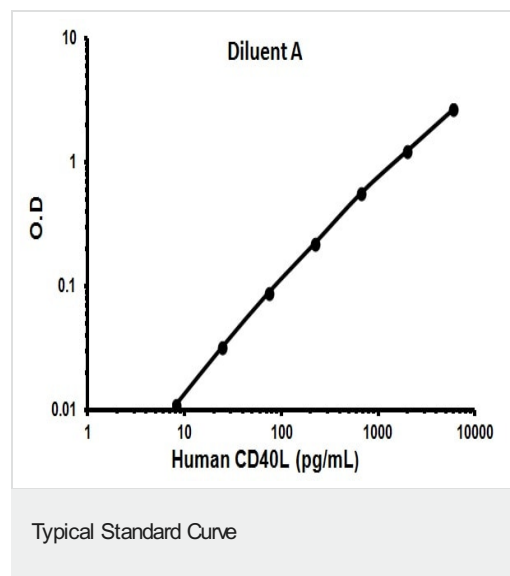
Properties

Storage instructions	Store at -20°C. Please refer to protocols.
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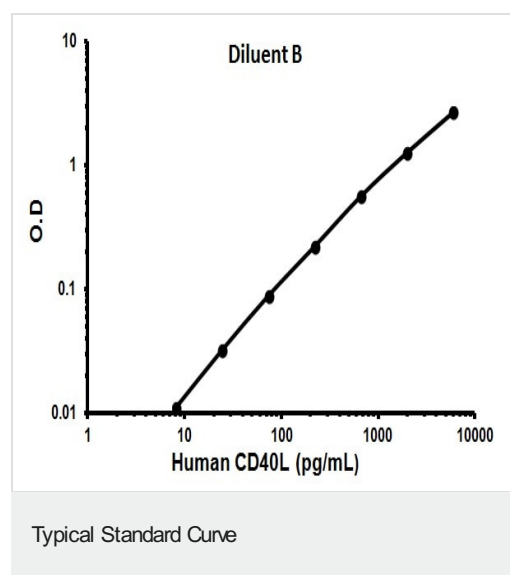
Components	1 x 96 tests
20X Wash Buffer	1 x 25ml
5X Assay Diluent B	1 x 15ml
600X HRP-Streptavidin Concentrate	1 x 200µl
Assay Diluent A	1 x 30ml
Biotinylated anti-Human CD40L	2 vials
CD40L Microplate (12 x 8 well strips)	1 unit
Recombinant Human CD40L Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

Function	<p>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.</p> <p>Release of soluble CD40L from platelets is partially regulated by GP IIb/IIIa, actin polymerization, and an matrix metalloproteinases (MMP) inhibitor-sensitive pathway.</p>
Tissue specificity	Specifically expressed on activated CD4+ T-lymphocytes.
Involvement in disease	<p>Defects in CD40LG are the cause of X-linked immunodeficiency with hyper-IgM 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.</p>
Sequence similarities	Belongs to the tumor necrosis factor family.
Post-translational modifications	<p>The soluble form derives from the membrane form by proteolytic processing.</p> <p>N-linked glycan is a mixture of high mannose and complex type. Glycan structure does not influence binding affinity to CD40.</p> <p>Not O-glycosylated.</p>
Cellular localization	Secreted and Cell membrane.

Images



Representative Standard Curve using ab99991.



Representative Standard Curve using ab99991.

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