

Recombinant Human CD40L / CD40 Ligand,

Animal Free & Carrier Free

Cat #: C-CYP226

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

CD40, belonging to the TNF receptor family, is a cell surface protein generally expressed on B cells, dendritic cells, monocytes, thymic epithelial cells and on T cells at low levels. The membrane-anchored CD40 Ligand is expressed almost exclusively on activated CD4+ T lymphocytes. CD40 signaling plays a significant role immunoglobulin (Ig) class switching, and is critical for the proliferation and differentiation of B cells. A disease "immunodeficiency with hyper-IgM", characterized by failure to produce IgG, IgA and IgE due to failure expression of CD40L. The soluble form of CD40L is produced in vivo by an intracellular proteolytic processing of the entire TNF homologous region (18 kDa protein) of CD40L.

Product Information

Source: *Escherichia Coli*.

Purity: >95% as determined by SDS-PAGE. Ni-NTA chromatography.

Biological Activity: Measure by its ability to induce IL-8 secretion in human PBMCs. The ED₅₀ for this effect is < 5 ng/mL.

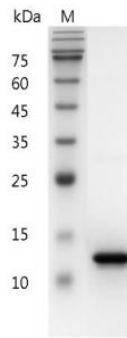
Endotoxin: <0.1EU per 1µg of the protein by the LAL method.

Amino acid sequence:

MQKGDQNPQIAAHVISEASSKTTSVLQWAEKGYTMSNNLVTLENGKQLTVKROGLYYIYAQVTFCSNREASSQAPFIASLCLKSPGRFERI

LLRAANTHSSAKPCGQQSIHLGGVFELQPGASVFNVTDPQSQVSHGTGFTSFGLLKL with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 8.0.



SDS-PAGE analysis of recombinant human CD40L

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.