Leader in Biomolecular Solutions for Life Science

www.abclonal.com

# Recombinant Mouse□chicken CD8A□CD40L Protein

**Catalog No.: RP01891** **Recombinant**

## Sequence Information

| Species | Gene ID | Swiss Prot |
|---|---|---|
| Mouse | 12525 | P01731 |
| □chicken | □395485 | □Q9I8D8 |

**Tags**
C-hFc

**Synonyms**
Ly-2; Ly-B; Ly-35; Lyt-2;CD8A&CD40 ligand; CD40-L; Tumor necrosis factor ligand superfamily member 5; Cleaved into: CD40 ligand; membrane form; CD40 ligand; soluble form; sCD40L

## Product Information

**Source**
HEK293 cells

**Purification**

**Calculated MW**

**Observed MW**

**Endotoxin**

**Formulation**
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

**Reconstitution**
Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact


400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn


## Background

T-cell surface glycoprotein CD8 alpha chain, also known as CD8a, is a single-pass type I membrane protein. The CD8 glycoprotein is expressed by thymocytes, mature T cells and natural killer (NK) cells and has been implicated in the recognition of monomorphic determinants on major histocompatibility complex (MHC) Class I antigens, and in signal transduction during the course of T-cell activation. Both human and rodent CD8 antigens are comprised of two distinct polypeptide chains, alpha and beta. The Ig domains of CD8 alpha are involved in controlling the ability of CD8 to be expressed. Mutation of B- and F-strand cysteine residues in CD8 alpha reduced the ability of the protein to fold properly and, therefore, to be expressed. Defects in CD8A are a cause of familial CD8 deficiency. Familial CD8 deficiency is a novel autosomal recessive immunologic defect characterized by absence of CD8+ cells, leading to recurrent bacterial infections.&CD40 Ligand (CD40L; CD154; TRAP) belongs to the tumor necrosis factor (TNF) family, is the ligand for CD40/TNFRSF5, specifically expressed on activated CD4+ T-lymphocytes. CD40L is a type II transmembrane protein on B cells triggers important signals for B cell differentiation, maturation, and apoptosis. It acts function by cross-linking on T-cells to generate a costimulatory signal and thus enhances the production of IL4 and IL10 in conjunction with the TCR/CD3 ligation and CD28 costimulation, as well as promoting the production of interferon-γ, and TNF-α. CD40L, binding with CD40 on antigen-presenting cells (APC), activates TNFR-associated factor 2- and IKK2-dependent pathways with stimulating I-κB kinase (IKK), increasing NF-κB DNA binding, and p65 nuclear translocation. The activation of I-κB kinase leads to strongly c-Jun N-terminal kinase activation as well as GST-I-κB and GST-p65 phosphorylation. CD40L also involves in MAPK pathways that strongly repress Bcl-6 with inducing the phosphorylation of Erk1/2, p38 and Jnk1/2 and activating IRF4 mediated by NF-κB. CD40L also binds to and signals through several integrins, including αvβ3 and α5β1, which bind to the trimeric interface of CD40L. CD40L plays a major role in immune response and is a major target for inflammation

## Basic Information

**Description**
Recombinant Recombinant Mouse□chicken CD8A□CD40L Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Met1-Ala192□Met111-Leu272) of Mouse□chicken CD8A□CD40L(Accession #P01731□Q9I8D8) fused with a hFc tag at the C-terminus.

**Bio-Activity**

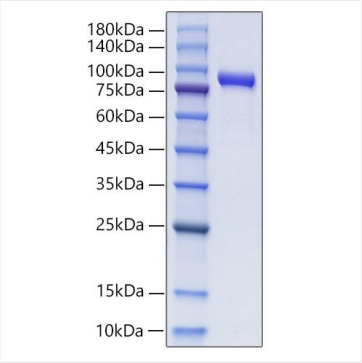
**Shipping**
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

**Storage**
Store at -20℃
Avoid repeated freeze/thaw cycles.

**Operational Notes**
For your safety and health, please wear a lab coat and disposable gloves for handling.

* □□□□□□□□□□□□□□□□□□□□□□□□□□□□

## Validation Data




Recombinant Mouse□chicken CD8A□CD40L Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.