Cynomolgus CD40L / CD154 / TNFSF5 Protein (Fc Tag)

Catalog Number: **90096-C01H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

CD40LG, CD40L, TNFSF5

Protein Construction:

A DNA sequence encoding the cynomolgus CD40LG (F6Q0N6) (Met113-Leu261) was expressed, with the Fc region of human IgG1 at the N-terminus.

Source: Cynomolgus

Expression Host: Human Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Glu

Molecular Mass:

The recombinant cynomolgus CD40LG is a disulfide-linked homodimer. The reduced monomer comprises 409 amino acids and has a calculated molecular mass of 44.7 KDa.The apparent molecular mass of the protein is approximately 54 KDa respectively in SDS-PAGE.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

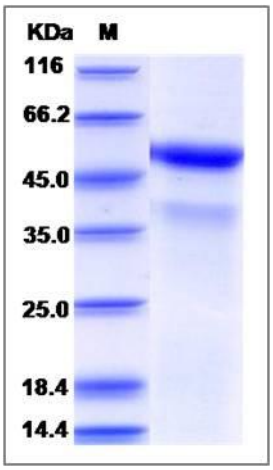
Usage Guide

Storage:

Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

CD40 ligand, also known as CD40-L, T-cell antigen Gp39, TNF-related activation protein, Tumor necrosis factor ligand superfamily member 5, CD154, CD40L and TNFSF5, is a single-pass type II membrane protein which belongs to the tumor necrosis factor family. CD40L (CD154 / TNFSF5) is specifically expressed on activated CD4+ T-lymphocytes. The soluble form of CD40L (CD154 / TNFSF5) is derived 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. Release of soluble CD40L from platelets is partially regulated by GP IIb/IIIa, actin polymerization, and an matrix metalloproteinases (MMP) inhibitor-sensitive pathway. CD40L (CD154 / TNFSF5) mediates B-cell proliferation in the absence of co-stimulus as well as IgE production in the presence of IL-4. It is involved in immunoglobulin class switching. Defects in CD40L are the cause of X-linked immunodeficiency with hyper-IgM type 1 (HIGM1), also known as X-linked hyper IgM syndrome (XHIM). It is an immunoglobulin isotype switch defect characterized by elevated concentrations of serum IgM and decreased amounts of all other isotypes.

References

1. Korthaeuer U. et al., 1993, Nature. 361: 539-41.
2. Lin Q. et al., 1996, J Clin Invest. 97: 196-201.
3. Seyama K. et al.,1998, Blood. 92: 2421-34.
4. Khandekar SS. et al., 2001, Protein Expr Purif. 23: 301-10.
5. Furman MI. et al., 2004, J Am Coll Cardiol. 43: 2319-25.