

Mouse LY-96 / ESOP-1 Protein (Fc Tag)

Catalog Number: 51098-M02H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

ESOP-1; ly-96; MD-2; MD2; ESOP-1; MD-2; MD2

Protein Construction:

A DNA sequence encoding the mouse LY96 (Q9JHF9) (Met1-Asn160) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 95 % 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 °C

Predicted N terminal: Glu 19

Molecular Mass:

The recombinant mouse LY96/Fc is a disulfide-linked homodimer. The reduced monomer comprises 383 amino acids and has a predicted molecular mass of 43.4 kDa. The apparent molecular mass of the protein is approximately 47 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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:

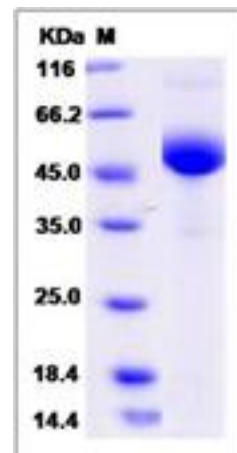
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

LY-96, also known as ESOP-1, is a protein which associates with toll-like receptor 4 on the cell surface and confers responsiveness to lipopolysaccharide (LPS). LY-96 also cooperates with TLR2 in the response to cell wall components from Gram-positive and Gram-negative bacteria. It enhances TLR4-dependent activation of NF-kappa-B. ESOP-1 has 160 amino acids, the sequence of which shows 64% identity with human ESOP-1/MD-2. ESOP-1 mRNA is highly expressed in the mouse embryos at 7.5 days after coitus.

References

1. Shimazu R., *et al.*, (1999), MD-2, a molecule that confers lipopolysaccharide responsiveness on Toll-like receptor 4. *J. Exp. Med.* 189:1777-1782.
2. Kato K., *et al.*, (2000), ESOP-1, a secreted protein expressed in the hematopoietic, nervous, and reproductive systems of embryonic and adult mice. *Blood* 96:362-364.
3. Schromm A.B., *et al.*, (2001), Molecular genetic analysis of an endotoxin nonresponder mutant cell line. A point mutation in a conserved region of MD-2 abolishes endotoxin-induced signaling. *J. Exp. Med.* 194:79-88.

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