Human CD8B / P37 / LEU2 Protein

Catalog Number: **11031-HCCH**

General Information

Gene Name Synonym:

CD8B1; LEU2; LY3; LYT3; P37

Protein Construction:

A DNA sequence encoding the extracellular domain of human CD8B (P10966-1) (Met1-Pro170) was expressed with six amino acids (LEVLFQ) at the C- terminus.

Source: Human

Expression Host: HEK293 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: Leu 22

Molecular Mass:

The recombinant human CD8B comprises 156 amino acids and has a predicted molecular mass of 17.6 kDa. The apparent molecular mass of the protein is approximately 27.3 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:

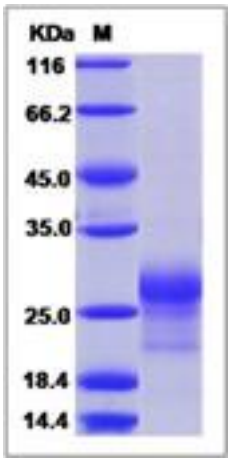
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CD8B (CD8b molecule), also known as P37 and LEU2, contains 1 Ig-like V-type (immunoglobulin-like) domain. The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. The CD8 antigen, acting as a coreceptor, and the T-cell receptor on the T lymphocyte recognize antigens displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The functional coreceptor is either a homodimer composed of two alpha chains, or a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant homology to immunoglobulin variable light chains. P37 gene encodes the CD8 beta chain isoforms. Multiple alternatively spliced transcript variants encoding distinct membrane associated or secreted isoforms have been described. A pseudogene, also located on chromosome 2, has been identified. CD8 is thought to play a role in the process of T-cell mediated killing.

References

1.Leahy DJ, *et al.* (1992) Crystal structure of a soluble form of the human T cell coreceptor CD8 at 2.6 A resolution. Cell. 68(6):1145-62. 2.Gao G, *et al.* (2000) Molecular interactions of coreceptor CD8 and MHC class I: the molecular basis for functional coordination with the T-cell receptor. Immunol Today. 21(12):630-6. 3.Devine L, *et al.* (1999) Orientation of the Ig domains of CD8 alpha beta relative to MHC class I. J Immunol. 162(2):846-51.