General Information

Gene Name Synonym:
BL11; HB15

Protein Construction:
A DNA sequence encoding the human CD83 (Q01151-1) extracellular domain (Met 1-Ala 143) was expressed, with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing
Purity: > 92 % 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: Thr 20

Molecular Mass:
The recombinant human CD83 consists of 135 amino acids and predicts a molecular mass of 15.5 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh CD83 is approximately 20-30 kDa due to different glycosylation.

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.

Protein Description

The cluster of differentiation (CD) system is commonly used as cell markers in immunophyntotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD83 is considered as a marker of mature dendritic cells as well as an adhesion receptor that binds to resting monocytes and a subset of activated CD8+ T cells. In certain conditions, CD83 tended to dimerize or even multimerize through its aberrant intermolecular disulfide bonds. The injection of CD83-Ig can significantly enhance the rate of tumor growth and inhibit the T cell growth.

References