

Recombinant Human CD74 protein (His Tag)

Catalog Number: PDMH100058

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Species	Human
Source	HEK293 Cells-derived Human CD74 protein Gln73-Met232, with an C-terminal His
Calculated MW	17.5 kDa
Observed MW	25 kDa
Accession	P04233
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Background

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. 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. CD74, also known as HLA class2 histocompatibility antigen gamma chain and HLA-DR antigens-associated invariant chain, is a polypeptide involved in the formation and transport of MHC class2 protein. CD74 is expressed by B cells, macrophages, and Reed-Sternberg cells. When MHC class 2 protein was in the rough ER, its peptide-binding cleft was blocked by CD74 to prevent it from interacting with the endogenous peptides. CD74 also serves to facilitate MHC class2's export from ER.