

Recombinant Human CD44 Protein(Trx Tag)

Catalog Number: GPEH1108

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

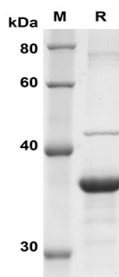
Description

Species	Human
Source	E.coli-derived Human CD44 protein Leu24-Ser182, with an N-terminal Trx
Calculated MW	37.3 kDa
Observed MW	37 kDa
Accession	P16070
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 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.

Data



SDS-PAGE analysis of Human CD44 proteins, 2µg/lane of Recombinant Human CD44 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 37 kDa

Background

CD44 is a type I transmembrane protein and a member of the cartilage link protein family. It is involved in cell-cell and cell-matrix interactions and signal transduction. Several CD44 ligands have been identified. The most extensively characterized ligand for CD44 is hyaluronan, a component of the extracellular matrix. CD44 protein is expressed on the majority of immune cells. The binding of CD44 to hyaluronan is induced on T lymphocytes after activation by antigen and on monocytes after stimulation by inflammatory agents. Under inflammatory conditions, CD44 on endothelial cells presents hyaluronan to CD44 on activated T lymphocytes and mediates a rolling interaction under flow conditions. Perturbations of the hyaluronan-CD44 interaction at the plasma membrane by various antagonists result in attenuation of receptor tyrosine kinase and transporter activities and inhibition of tumor progression in vivo. CD44 is known to interact with the ezrin family (ERM family) members and form a complex that plays diverse roles within both normal and abnormal cells, particularly cancer cells. CD44 and ezrin and their respective complex have properties suggesting that they may be important in the process of tumour-endothelium interactions, cell migrations, cell adhesion, tumour progression and metastasis.