

Recombinant Human CD24 Fc Chimera Protein, Insect Cells Derived

#R00600

Size: 5 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

CD24, also known as Heat-Stable Antigen and Nectadrin, is a heavily and variably glycosylated 30 kDa-60 kDa GPI-linked sialoprotein. Human CD24 is expressed on B lineage cells and granulocytes, on epithelial, neuronal, and muscle cells, and on a range of tumor cells. In mouse, CD24 is even more widely expressed, particularly on T cells, monocytes, and dendritic cells. CD24 expression is regulated during lineage development and with the activation of various cell types. Antibody crosslinking of CD24 enhances the induction of apoptosis in B and T lymphocytes which contributes to negative selection and the induction of immune tolerance. CD24 on antigen presenting cells cooperates with B7 molecules in the costimulation of T cells. CD24 associates in cis with Siglec-10 (or Siglec-G in mouse) and with the danger-associated molecules HMGB1, HSP70, or HSP90 which are released from necrotic or damaged cells. Formation of these ternary

complexes fills a protective role: the resulting Siglec-10 signaling inhibits inflammatory responses that are otherwise induced by extracellular DAMPs. Mature human CD24 shares 30% and 42% amino acid sequence identity with mouse and rat CD24, respectively.

AA Sequence

AGMGMSETTTGTSSNSSQSTSNISGLAPNPTNATTKA
AGIEGRMDEPKSSDKHTCPCPAPEFEGAPSVFLF
PPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLN
GKEYCKVSNKALPTPIEKTIKAKGQPREPQVYTLPL
PSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFC
SVMHEALHNHYTQKSLSLSPGK

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.

Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Species	Human
Source	Insect Cells
Tags	Fc
Molecular Weight	The protein has a calculated MW of 30.4 kDa, containing 276 amino acids. The protein migrates as 40-50 kDa in SDS-PAGE under reducing condition due to glycosylation.
Purity	> 95 % by SDS-PAGE analyses.
Biological Activity	Testing in progress.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS.
Endotoxin	Less than 0.1 EU/µg of

	rHuCD24-Fc as determined by LAL method.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.