

Recombinant Human CD247/CD3-ZETA Protein(His,SUMO)

Catalog Number: GPEH0693

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

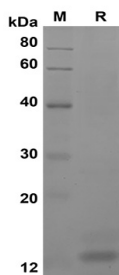
Description

Species	Human
Source	E.coli-derived Human CD247 protein Arg52-Arg164, with an N-terminal His & Sumo
Calculated MW	13 kDa
Observed MW	13 kDa
Accession	P20963
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 CD247/CD3-ZETA proteins,
2µg/lane of Recombinant Human CD247/CD3-ZETA
proteins was resolved with SDS-PAGE under reducing
conditions, showing bands at 13 KD.

Background

CD247, also known as CD3-ZETA, belongs to the CD3Z/FCER1G family. It contains 3 ITAM domains. As a-cell receptor zeta, CD247 forms the T-cell receptor-CD3 complex together with T-cell receptor alpha/beta and gamma/delta heterodimers, and with CD3-gamma,-delta and -epsilon. The zeta chain plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. Low expression of the antigen results in impaired immune response. Two alternatively spliced transcript variants encoding distinct isoforms have been found for CD247 gene. Defects in CD247 can cause immunodeficiency due to defect in CD3-zeta. An immunological deficiency characterized by T-cells impaired immune response to alloantigens, tetanus toxoid and mitogens. CD247 may play a role in assembly and expression of the TCR complex as well as signal transduction upon antigen triggering.