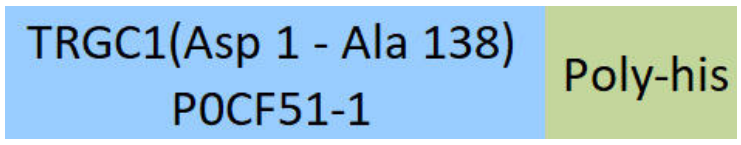
Synonym

TRGC1

Source

Human TRGC1, His Tag(TR1-H52H3) is expressed from human 293 cells (HEK293). It contains AA Asp 1 - Ala 138 (Accession # P0CF51-1).
Predicted N-terminus: Asp 1

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 17.6 kDa. The protein migrates as 30-40 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

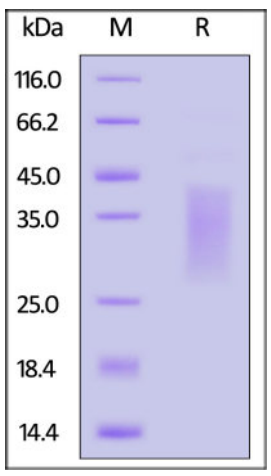
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human TRGC1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Background

The transmembrane protein, TCR, comprise of two disulphide-linked polypeptide chains: a α and β chain, a γ and δ chain. Each polypeptide chain consists of a variable and a constant region. TRGC1 is the constant region of T-cell receptor (TCR) gamma chain. It recognizes the non-peptide antigens frequently expressed at the epithelial boundaries, which means the antigens activating γδ T cells are mostly MHC independent. A wide range of γδ T cell functions have been described in

humans and mice, including skin and mucosal epithelial wound repair, induction of tolerance, cytotoxicity and the production of various cytokines that regulate immune responses.