Biotinylated Human TRBC1 Protein, His,Avitag™

Catalog # TR1-H82E6

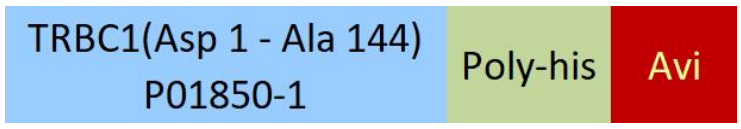
Synonym

T cell receptor beta constant 1,TRBC1

Source

Biotinylated Human TRBC1, His,Avitag(TR1-H82E6) is expressed from human 293 cells (HEK293). It contains AA Asp 1 - Ala 144 (Accession # P01850-1).

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 19.9 kDa. The protein migrates as 23 kDa and 26 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 0.2 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

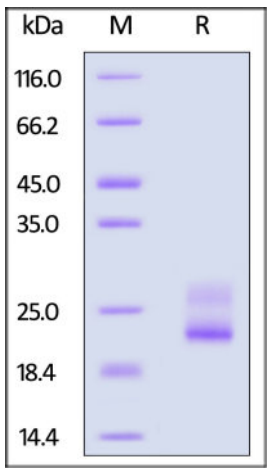
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



Biotinylated Human TRBC1, His,Avitag 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. TRBC1 is the constant region of T-cell receptor (TCR) beta chain. TRBC1 is presented on the surface of T cell and recognized

peptide-major histocompatibility (MH) (pMH) that are displayed by antigen presenting cells (APC). TRBC1 is participate in an adaptive immune response and has been well-studied in T cell therapy.