

Human TRBC1 Protein

Cat. No. TRB-HM2C1



Description

Source	Recombinant Human TRBC1 Protein is expressed from HEK293 with hFc (IgG1) tag at the C-terminus. It contains Asp1-Ala144.
Accession	P01850
Molecular Weight	The protein has a predicted MW of 42.14 kDa. Due to glycosylation, the protein migrates to 45-60 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

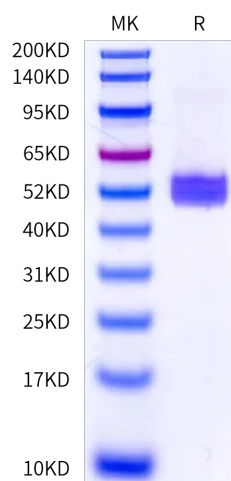
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

T cell receptor β -chain constant (TRBC) is a promising class of cancer targets consisting of two highly homologous proteins, TRBC1 and TRBC2. While each TCR α/β carries either TRBC1 or TRBC2 in a mutually exclusive manner, the normal T cell population comprises a mixture of individual cells, either expressing TRBC1 or TRBC2. However, the cancer T-cell population exclusively expresses either TRBC1 or TRBC2. Using antibodies to specifically target TRBC1 (TCR $\alpha\beta$ 1) or TRBC2 (TCR $\alpha\beta$ 2) (in the case of a TRBC1+ T cell malignancy or the case of a TRBC2+ malignancy, respectively) has been proposed to be a strategy to eradicate all cells of malignant cancer.

Assay Data

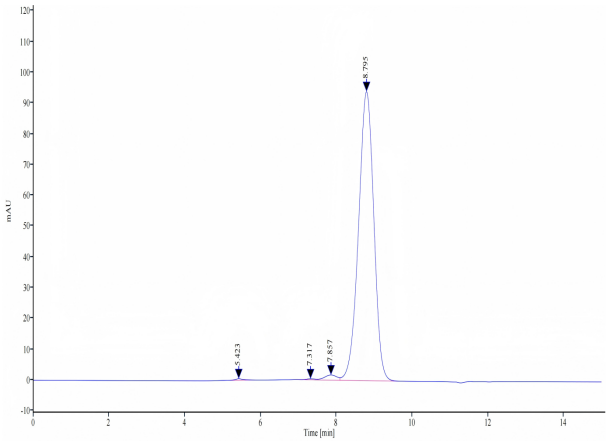
Bis-Tris PAGE



Human TRBC1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



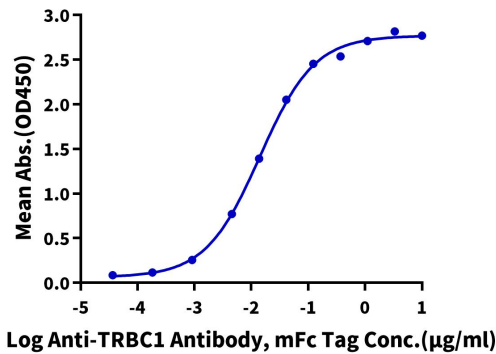
The purity of Human TRBC1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human TRBC1, hFc Tag ELISA

0.05µg Human TRBC1, hFc Tag Per Well



Immobilized Human TRBC1, hFc Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-TRBC1 Antibody, mFc Tag with the EC50 of 14.2ng/ml determined by ELISA.