

ARG70774

Human TCR alpha recombinant protein (His-Avi-tagged, C-ter)

Package: 100 µg, 20 µg

Store at: -20°C

Summary

Product Description	HEK293 expressed, His-Avi-tagged (C-ter) TCR alpha recombinant protein
Tested Application	SDS-PAGE
Target Name	TCR alpha
Species	Human
Expression System	HEK293
Alternate Names	TRAC; T cell receptor alpha constant; TRAC; T-cell receptor alpha chain C region; TRAC; TCRA; IMD7

Properties

Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 90% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

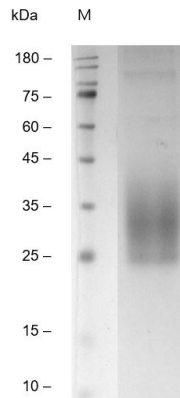
Bioinformation

Gene Symbol	TRAC
Gene Full Name	T cell receptor alpha constant
Background	T cell receptors recognize foreign antigens which have been processed as small peptides and bound to major histocompatibility complex (MHC) molecules at the surface of antigen presenting cells (APC). Each T cell receptor is a dimer consisting of one alpha and one beta chain or one delta and one gamma chain. In a single cell, the T cell receptor loci are rearranged and expressed in the order delta, gamma, beta, and alpha. If both delta and gamma rearrangements produce functional chains, the cell expresses delta and gamma. If not, the cell proceeds to rearrange the beta and alpha loci. This region represents the germline organization of the T cell receptor alpha and delta loci. Both the alpha and delta loci include V (variable), J (joining), and C (constant) segments and the delta locus also includes diversity (D) segments. The delta locus is situated within the alpha locus, between the alpha V and J segments. During T cell development, the delta chain is synthesized by a recombination event at the DNA level joining a D segment with a J segment; a V segment is then joined to the D-J gene. The alpha chain is synthesized by recombination joining a single V segment with a J segment. For both chains, the C segment is later joined by splicing at the RNA level. Recombination of many different V segments with several J segments provides a wide range of antigen recognition. Additional diversity is attained by junctional diversity, resulting from the random additional of nucleotides by terminal deoxynucleotidyltransferase. Five variable segments can be used in either alpha or delta chains and are

described by TRAV/DV symbols. Several V and J segments of the alpha locus are known to be incapable of encoding a protein and are considered pseudogenes.

Function	Constant region of T cell receptor (TR) alpha chain . [UniProt]
PTM	Disulfide bond; Glycoprotein. [UniProt]
Cellular Localization	Membrane; Single-pass membrane protein. [UniProt]

Images



ARG70774 Human TCR alpha recombinant protein (His-Avi-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70774 Human TCR alpha recombinant protein (His-Avi-tagged, C-ter).