ARG45152
anti-TCR alpha antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes TCR alpha
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, IHC, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Target Name	TCR alpha
Species	Human
Immunogen	Recombinant protein containing to human TCR alpha.
Conjugation	Un-conjugated
Alternate Names	TRAC; T-cell receptor alpha chain C region; TRAC; TCRA; IMD7

Application Instructions

Application table

Application	Dilution
FACS	1 - 3 µg/10^6 cells
IHC	
WB	0.1-0.5 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: 45 kDa

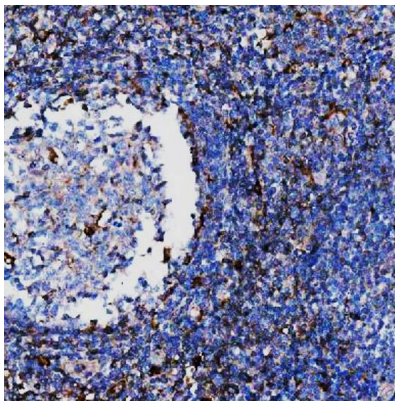
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

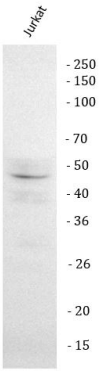
Gene Symbol	TRAC
Gene Full Name	T cell receptor alpha constant
Background	T cell receptors recognize foreign antigens which have been processed as small peptides and bound to major histocompatibility complex (MHC) molecules at the surface of antigen presenting cells (APC). Each T cell receptor is a dimer 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]
Calculated Mw	16 kDa
PTM	Disulfide bond; Glycoprotein. [UniProt]
Cellular Localization	Membrane; Single-pass membrane protein. [UniProt]

Images



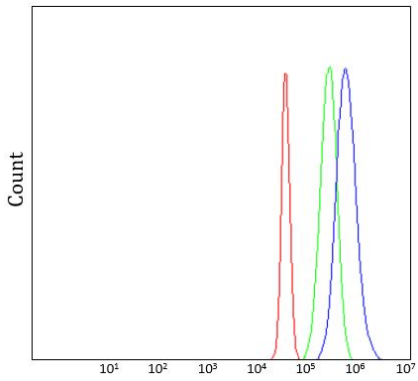
ARG45152 anti-TCR alpha antibody IHC-P image

Immunohistochemistry: Human tonsil stained with ARG45152 anti-TCR alpha antibody at 2 µg/ml dilution.



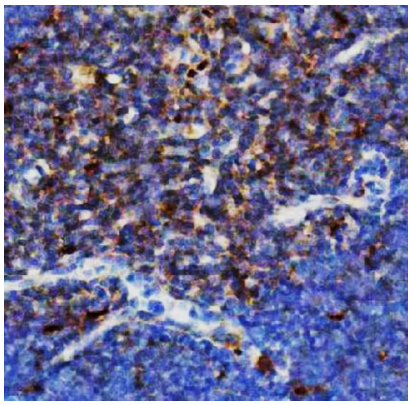
ARG45152 anti-TCR alpha antibody WB image

Western blot: Jurkat stained with ARG45152 anti-TCR alpha antibody at 0.5 µg/ml dilution.



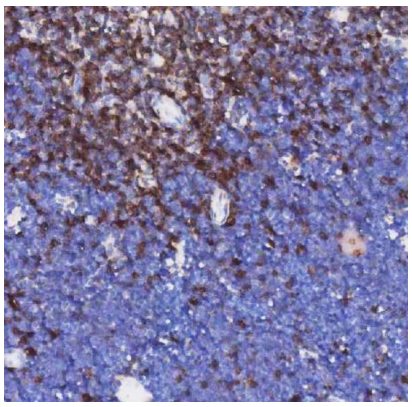
ARG45152 anti-TCR alpha antibody FACS image

Flow Cytometry: Jurkat stained with ARG45152 anti-TCR alpha antibody at 1 µg/10^6 cells dilution.



ARG45152 anti-TCR alpha antibody IHC-P image

Immunohistochemistry: Rat thymus stained with ARG45152 anti-TCR alpha antibody at 2 µg/ml dilution.



ARG45152 anti-TCR alpha antibody IHC-P image

Immunohistochemistry: Mouse thymus stained with ARG45152 anti-TCR alpha antibody at 2 µg/ml dilution.