

Human/Mouse/Rat T Cell Receptor α Chain-V α24-J αQ Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF4988

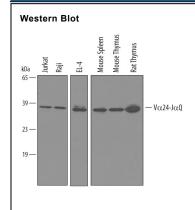
DESCRIPTION								
Species Reactivity	Human/Mouse/Rat							
Specificity	Detects human, mouse, and rat T Cell Receptor α Chain-V α24-J αQ in direct ELISAs and Western blots.							
Source	Polyclonal Sheep IgG							
Purification	Antigen Affinity-purified							
Immunogen	<i>E. coli</i> -derived recombinant human T Cell Receptor α Chain-V α24-J αQ Lys22-Pro135 Accession # ABC72391							
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.							

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

DATA



Detection of Human, Mouse, and Rat T Cell Receptor α Chain-V α24-J αQ by Western Blot. Western blot shows lysates of Raji human Burkitt's lymphoma cell line, Jurkat human acute T cell leukemia cell line, and EL-4 mouse lymphoblast cell line, mouse spleen, rat and, mouse thymus tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse/Rat T Cell Receptor α Chain-V α24-J αQ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4988) followed by HRPconjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for T Cell Receptor α Chain-V α24-J αQ at approximately 38 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

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Reconstitution Reconstitute at 0.2 mg/mL in sterile PBS.

ShippingThe product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

 $V\alpha24$ -JαQ (T cell receptor alpha chain) is a 31 kDa (predicted) member of the Ig superfamily. It constitutes an invariant α-chain that is paired with the Vβ11 chain on human NKT^{INV} cells, a subpopulation of NKR-P1A T cells. This TCR creates a binding site for CD1d-associated ligands that are presumed to involve glyco-/phospholipids. The human $V\alpha24V\beta11$ TCR is analogous to the $V\alpha14V\beta8$ complex in mice. Human $V\alpha24$ -JαQ is 276 amino acids in length. It contains a 21 aa signal sequence, multiple N-linked glycosylation sites, a V-type Ig-like domain (aa 36-133) and a TCR-related sequence of unknown function (aa 142-255). Considerable variability is noted over aa 22-114. The closest mouse ortholog to human $V\alpha24$ -JαQ shows 65% aa identity over aa 22-135.

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