Purified Anti-Human IL-2 Antibody[MQ1-17H12]

catalog number: **E-AB-F1200A**

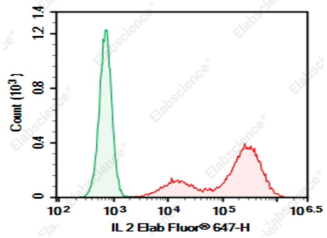
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Human
Immunogen	Recombinant Human IL-2 protein
Host	Rat
Isotype	Rat IgG2a, κ
Clone	MQ1-17H12
Purification	>98%, Protein A/G purified
Buffer	Phosphate-buffered solution, pH 7.2, containing 0.05% non-protein stabilizer. Dialyze to completely remove the stabilizer prior to labeling.

Applications	Recommended Dilution
FCM	≤ 0.2 μg per million cells in 100 μL volume

Data



HEK293T cells transfected with pcDNA3.1 plasmid encoding Human IL-2 gene were stained with 0.2 μg AF/LE Purified Anti-Human IL-2 Antibody[MQ1-17H12] (Right) and 0.2 μg Rat IgG2a, κ Isotype Control (Left), followed by Elab Fluor® 647-conjugated Goat Anti-Rat IgG Secondary Antibody.

Preparation & Storage

Storage	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
Shipping	Ice bag

Background

Toll-free: 1-888-852-8623
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Interleukin-2 (IL-2) is a O-glycosylated, four alpha -helix bundle cytokine that has potent stimulatory activity for antigen-activated T cells. It is expressed by CD4+ and CD8+ T cells, gamma δ T cells, B cells, dendritic cells, and eosinophils. Mature human IL-2 shares 56% and 66% aa sequence identity with Mouse and Rat IL-2, respectively. Human and Mouse IL-2 exhibit cross-species activity. The receptor for IL-2 consists of three subunits that are present on the cell surface in varying preformed complexes. The 55 kDa IL-2 R alpha is specific for IL-2 and binds with low affinity. The 75 kDa IL-2 R beta, which is also a component of the IL-15 receptor, binds IL-2 with intermediate affinity. The 64 kDa common gamma chain gamma c/IL-2 R gamma, which is shared with the receptors for IL-4, -7, -9, -15, and -21, does not independently interact with IL-2. Upon ligand binding, signal transduction is performed by both IL-2 R beta and gamma c. IL-2 is best known for its autocrine and paracrine activity on T cells. It drives resting T cells to prolifeRate and induces IL-2 and IL-2 R alpha synthesis. It contributes to T cell homeostasis by promoting the Fas-induced death of naïve CD4+ T cells but not activated CD4+ memory lymphocytes. IL-2 plays a central role in the expansion and maintenance of regulatory T cells, although it inhibits the development of Th17 polarized cells. Thus, IL-2 may be a key cytokine in the natural suppression of autoimmunity.

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