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

catalog number: **E-AB-F12000**

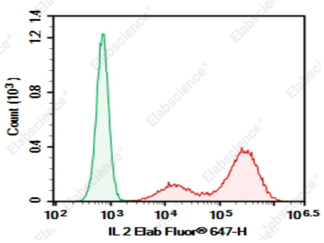
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

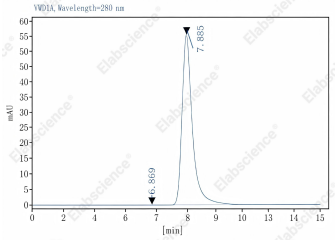
Reactivity	Human
Immunogen	Recombinant Human IL-2 protein
Host	Rat
Isotype	Rat IgG2a, κ
Clone	MQ1-17H12
Purification	> 98%, Protein A/G purified, ≥ 95% monomer by analytical SEC
Endotoxin	< 1 EU/mg determined by LAL assay
Conjugation	Unconjugated
Buffer	Sterile PBS, pH 7.2. Contains no stabilizers or preservatives

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 Purified Anti-Human IL-2 Antibody[MQ1-17H12], Functional Grade (Right) and 0.2 μg Rat IgG2a, κ Isotype Control (Left), followed by Elab Fluor® 647-conjugated Goat Anti-Rat IgG Secondary Antibody.



Monomer purity ≥95% as determined by analytical size-exclusion chromatography (SEC)

Preparation & Storage

Storage	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze/thaw cycles. This preparation contains no preservatives, thus it should be handled under aseptic conditions.
Shipping	Ice bag

Background

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 lymphocyte s. 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.

None (Azide-Free, Low Endotoxin) are perfectly suited to be used in culture or in vivo (for nonhuman studies) for functional assays blocking, neutralizing, activation or depletion where the presence of azide may damage cells or exogenous endotoxin may signal or activate cells.