

Purified Anti-Human CD152 Antibody[9D9]

catalog number: AN008120P

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

Description

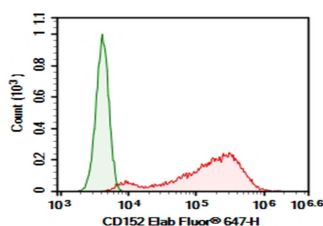
Reactivity	Human
Immunogen	Recombinant Human CD152 protein
Host	Mouse
Isotype	Mouse IgG2b, κ
Clone	9D9
Purification	>98%, Protein A/G purified
Conjugation	Unconjugated
Buffer	PBS, pH 7.2. Contains 0.05% proclin 300.

Applications

Recommended Dilution

FCM	2 $\mu\text{g/mL}$ (0.5×10^6 - 1×10^6 cells)
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Data



HEK293T cells transfected with pcDNA3.1 plasmid encoding Human CD152 gene were stained with 0.2 μg Purified Anti-Human CD152 Antibody[9D9] (Right) and 0.2 μg Mouse IgG2b, κ Isotype Control (Left), followed by Elab Fluor® 647-conjugated Goat Anti-Mouse 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

CTLA-4 and CD28, together with their ligands B7-1 and B7-2, constitute one of the dominant costimulatory pathways that regulate T- and B-cell responses. CTLA-4 and CD28 are structurally homologous molecules that are members of the immunoglobulin (Ig) gene superfamily. Both CTLA-4 and CD28 are composed of a single Ig V-like extracellular domain, a transmembrane domain and an intracellular domain. CTLA-4 and CD28 are both expressed on the cell surface as disulfide-linked homodimers or as monomers. The genes encoding these two molecules are closely linked on Human chromosome 2. CTLA-4 was originally identified as a gene that was specifically expressed by cytotoxic T lymphocytes. However, CTLA-4 transcripts have since been found in both Th1 and Th2, and CD4+ and CD8+ T cell clones. Whereas, CD28 expression is constitutive on the surfaces of 95% of CD4+ T cells and 50% of CD8+ T cells and is down regulated upon T cell activation, CTLA-4 expression is upregulated rapidly following T cell activation and peaks approximately 24 hours following activation. Although both CTLA-4 and CD28 can bind to the same ligands, CTLA-4 binds to B7-1 and B7-2 with 20-100-fold higher affinity than CD28. The physiological role of CTLA-4 in T cell costimulation is currently being studied.