Purified Anti-Mouse CD152 Antibody[9D9], Functional Grade

catalog number: **AN008120**

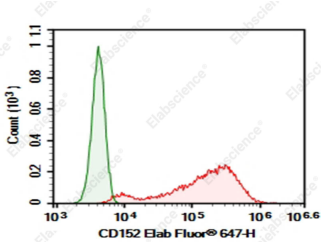
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Mouse
Immunogen	Recombinant Mouse CD152 protein
Host	Mouse
Isotype	Mouse IgG2b, κ
Clone	9D9
Purification	>98%, Protein A/G purified
Buffer	Sterile PBS, pH 7.2. < 1.0 EU per mg of the antibody as determined by the LAL method.

Applications	Recommended Dilution
FCM	≤ 0.2 μg per million cells in 100 μL volume
Depletion	Reported in the literature
Neut	Reported in the literature

Data



HEK293T cells transfected with pcDNA3.1 plasmid encoding Mouse CD152 gene were stained with 0.2 μg Purified Anti-Mouse CD152 Antibody[9D9], Functional Grade (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. This preparation contains no preservatives, thus it should be handled under aseptic conditions.
Shipping	Ice bag

Background

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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.

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.

Application References

Ramya Sivakumar, et al. Oncoimmunology. 2019 Oct 10;8(12):e1670019.