

## Ctla4

## Recombinant Mouse CTLA-4/CD152:Fc Chimera

Catalog No. CRM035 Quantity: 100 μg

Alternate Names: Cd152, Ctla-4, Ly-56

**Description:** CD152 [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. CD152 and CD28 are structurally homologous molecules that are members of the immunoglobulin (Ig) gene superfamily. Both CD152 and CD28 are composed of a single Ig V-like

extracellular domain, a transmembrane domain and an intracellular domain. CD152 and CD28 are both expressed on the cell surface as disulfide-linked homodimers or as monomers. CD152 was originally identified as a gene that was specifically expressed by cytotoxic T lymphocytes. However, CD152 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, CD152 expression is upregulated rapidly following T cell activation and peaks approximately 24 hours following activation. Although both CD152 and CD28 can bind to the same ligands, CD152 binds to B71 and B72 with 20-100-fold higher

affinity than CD28.

The extracellular domain of mouse CD152 [CTLA-4] (aa 38-160) is fused to the N-

terminus of the Fc region of mouse IgG2a.

Gene ID: 12477

Protein Accession No: NP\_033973.2

Source: NS1 cells

**Formulation:** Lyophilized from a 0.2 µm filtered solution containing PBS.

Purity: ≥98% (SDS-PAGE)

Endotoxin Level: <0.06 EU/µg purified protein as determined by LAL test (Lonza).

Biological Activity: Binds both CD80 (B7-1) and CD86 (B7-2) with high affinity and inhibits CD28 signaling

competitively. Kills the target cell completely.

**Reconstitution:** Reconstitute at 1 mg/ml with sterile water. Add 1X PBS to the desired protein

concentration.

Storage & Stability: Store at 4°C upon arrival and at -20°C for long term. Lyophilized product is stable for at

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least 1 year after receipt when stored at -20°C. After reconstitution, prepare aliquots and store at -20°C. Stable for up to 3 month at -20°C. **Avoid repeated freeze-thaw cycles.** 

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