

## CTLA4

### Recombinant Human CTLA-4/CD152:Fc Chimera Non-Lytic

<b>Catalog No.</b>	CRH031	<b>Quantity:</b>	100 µg
<b>Alternate Names:</b>	ALPS5, CD, CD152, CELIAC3, CTLA-4, GRD4, GSE, IDDM12		
<b>Description:</b>	<p>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.</p> <p>The extracellular domain of human CD152 [CTLA-4] (aa 37-160) is fused to the N-terminus of the Fc region of a mutant human IgG1.</p> <p>The chimera is non-lytic and acts as a long lasting fusion protein that only binds to the receptor. Mutations to the complement (C1q) and FcγR I binding sites of the IgGs Fc fragment render the fusion proteins incapable of antibody directed cytotoxicity (ADCC) and complement directed cytotoxicity (CDC).</p>		
<b>Gene ID:</b>	1493		
<b>Protein Accession No:</b>	NP_005205.2		
<b>Source:</b>	CHO cells		
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered solution containing PBS.		
<b>Purity:</b>	≥98% (SDS-PAGE)		
<b>Endotoxin Level:</b>	<0.06 EU/µg purified protein as determined by LAL test (Lonza).		
<b>Biological Activity:</b>	Measured by its ability to inhibit IL-2 secretion by stimulated Jurkat human acute T cell leukemia cells		
<b>Reconstitution:</b>	Reconstitute with 1 ml (100 µg/ml) sterile PBS.		
<b>Storage &amp; Stability:</b>	Store at 4°C upon arrival and at -20°C for long term. Lyophilized product is stable for at 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. <b>Avoid repeated freeze-thaw cycles.</b>		

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

