

## Recombinant Human CTLA-4 (C-Flag)

Catalog No: CS47

<b>Description</b>	Recombinant Human Cytotoxic T-lymphocyte Protein 4 is produced by our Mammalian expression system and the target gene encoding Lys36-Asp161 is expressed with a Flag tag at the C-terminus.
<b>Source</b>	Human Cells
<b>Alternative name</b>	Cytotoxic T-lymphocyte protein 4; Cytotoxic T-lymphocyte-associated antigen 4; CTLA-4; CD152; CTLA4
<b>Accession No.</b>	P16410
<b>Predicted Molecular Weight</b>	14.5kDa
<b>AP Molecular Weight</b>	20kDa, reducing conditions.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH7.4.
<b>Quality Control</b>	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Background** Cytotoxic Tlymphocyte 4(CTLA-4,CD152), is a type I transmembrane T cell inhibitory molecule that is a member of the Ig superfamily. Human or mouse CTLA4 cDNA encodes 223 amino acids (aa) including a 35 aa signal sequence, a 126 aa extracellular domain (ECD) with one Ig-like V-type domain, a 21 aa transmembrane (TM) sequence, and a 41 aa cytoplasmic sequence. It is widely expressed with highest levels in lymphoid tissues. CD28 and CTLA-4, together with their ligands, B7-1 and B7-2, constitute one of the dominant costimulatory pathways that regulate T and B cell responses. CD28 and CTLA-4 are structurally homologous molecules that are members of the immunoglobulin (Ig) gene superfamily. CTLA4 transmits an inhibitory signal to T cells, whereas CD28 transmits a stimulatory signal. Intracellular CTLA4 is also found in regulatory T Cells and may play an important role in their functions. Tcell activation through the Tcell receptor and CD28 leads to increased expression of CTLA4.

### SDS-Page

