



Product Datasheet

Product Name	Cytotoxic T-Lymphocyte Associated Antigen-4/ Fc Chimera Human Recombinant
Cata No	CB500268
Source	<i>Sf9 cells</i>
Synonyms	GSE, CD152, IDDM12, CELIAC3, CTLA-4.

Description

CTLA-4 is a member of the immunoglobulin superfamily and encodes a protein which transmits an inhibitory signal to T cells. The protein contains a V domain, a transmembrane domain, and a cytoplasmic tail. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. The membrane-bound isoform functions as a homodimer interconnected by a disulfide bond, while the soluble isoform functions as a monomer. Mutations in this gene have been associated with insulin-dependent diabetes mellitus, Graves disease, Hashimoto thyroiditis, celiac disease, systemic lupus erythematosus, thyroid-associated orbitopathy, and other autoimmune diseases.

Cytotoxic T-Lymphocyte Associated Antigen-4 Human Recombinant produced in insect cells is a homodimeric, glycosylated, polypeptide chain containing a total molecular mass of 80 kDa. Each subunit (40kDa) is fused to a polypeptide linker to the Fc portion of Human IgG1. CTLA4 is expressed in low copy number by T-cells only after activation, but it binds CD28-ligand with approximately 20-fold higher affinity than CD28. A soluble form of the extracellular domain of CTLA-4 has been shown to bind CD28-ligand with high avidity and to suppress T-cell-dependent antibody responses in vivo. Large doses of this soluble protein also suppress

responses to a second immunization. CTLA-4 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Purity

Greater than 95.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.

Formulation

CTLA-4 was lyophilized with no additives.

Stability

Lyophilized Cytotoxic T-Lymphocyte Associated Antigen Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CTLA-4 should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

The sequence of the amino acids was determined and was found to be: Lys-Ala-Met-His-Val.

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