

## DATASHEET

Version 20181206

# CTLA-4 Fc Chimera, Human

**Cat. No.:** Z03373-50

**Size:** 50.0 ug

**Synonyms:** CTLA-4

### Description:

Cytotoxic T lymphocyte-associated molecule-4 (CTLA-4) is a cell surface molecule that is closely related to CD28, and a powerful negative regulator of T cell activation. Structurally, CTLA-4 is a member of the Ig superfamily, having a single extracellular V-like domain, homology with CD28; The overall sequence homology between CD28 and CTLA-4 is about 20%, but they share a 27%(murine) to 31%(human) identity at the amino acid level. Inhibitory receptor acting as a major negative regulator of T-cell responses. The affinity of CTLA-4 for its natural B7 family ligands, CD80 and CD86, is considerably stronger than the affinity of their cognate stimulatory coreceptor CD28. Recombinant Human CTLA-4 Fc Chimera produced in CHO cells is a polypeptide chain containing 378 amino acids with the C-terminal human IgG1 Fc fragment. A fully biologically active molecule, rhCTLA-4 has a molecular mass of 45-48 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Amino Acid Sequence:

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00001 AMHVAQPAVV LASSRGIASF VCEYASPGKA TEVRVTVLRQ
00041 ADSQVTEVCA ATYMMGNELT FLDDSICTGT SSGNQVNLT
00081 QGLRAMDTGL YICKVELMYP PPYYLGIGNG TQIYVIDPEP
00121 CPDSDF
```

**Source:** CHO

**Species:** Human

**Biological Activity:** Activity1: Measured by its ability to inhibit IL-2 secretion by co-culturing stimulated Jurkat human acute T cell leukemia cells and CD80 expression CHO stable cell line.

Activity2: Immobilized B7-2(CD86), His, Human(Cat.No.Z03452) at 2 µg/mL (100 µL/well) can bind CTLA-4 Fc Chimera, Human with a linear range of 0.97-7.8 ng/mL

**Molecular Weight:** 45-48 kDa, observed by reducing SDS-PAGE.

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

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

**Purity:** > 98% as analyzed by reducing SDS-PAGE.

**Endotoxin Level:** <0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant Human CTLA-4 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution Human CTLA-4 should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.