

Human CellExp™ CTLA4/CD152, Human Recombinant

CATALOG #: 7476-20 20 µg
7476-100 100 µg

ALTERNATE NAMES: CTLA4, CD152, CELIAC3, GRD4, GSE, ICOS, IDDM12

SOURCE: HEK 293 cells (Ala 37 – Phe 162)

PURITY: ≥ 95% by SDS-PAGE gel

MOL. WEIGHT: This protein is fused with 6xhis tag at the C-terminus, and has a calculated MW of 14.3 kDa. The predicted N-terminus is Ala 37. DTT-reduced Protein migrates as 25 kDa in SDS-PAGE due to glycosylation.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

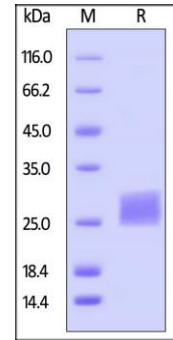
FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

DESCRIPTION: CTLA-4 (Cytotoxic T-Lymphocyte Antigen 4) is also known as CD152 (Cluster of differentiation 152), is a protein receptor that downregulates the immune system. CTLA4 is a member of the immunoglobulin superfamily, which is expressed on the surface of Helper T cells and transmits an inhibitory signal to T cells. The protein contains an extracellular V domain, a transmembrane domain, and a cytoplasmic tail. Alternate splice variants, encoding different isoforms. CTLA4 is similar to the T-cell costimulatory protein, CD28, and both molecules bind to CD80 and CD86, also called B7-1 and B7-2 respectively, on antigen-presenting cells. 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 be important to their function. T cell activation through the T cell receptor and CD28 leads to increased expression of CTLA-4, an inhibitory receptor for B7 molecules. Fusion proteins of CTLA4 and antibodies (CTLA4-Ig) have been used in clinical trials for rheumatoid arthritis.

BIOLOGICAL ACTIVITY: Measured by its binding ability in a functional ELISA. Immobilized Human B7-2, Fc Tag at 2 µg/mL (100 µL/well) can bind Human CTLA-4, His Tag with a linear range of 1-6.4 ng/mL. Immobilized Human B7-1, Fc Tag at 2 µg/mL (100 µL/well) can bind Human CTLA-4, His Tag with a linear range of 0.16-2.56 ng/mL.



Human CTLA-4, His Tag on SDS-PAGE under reducing (R) condition

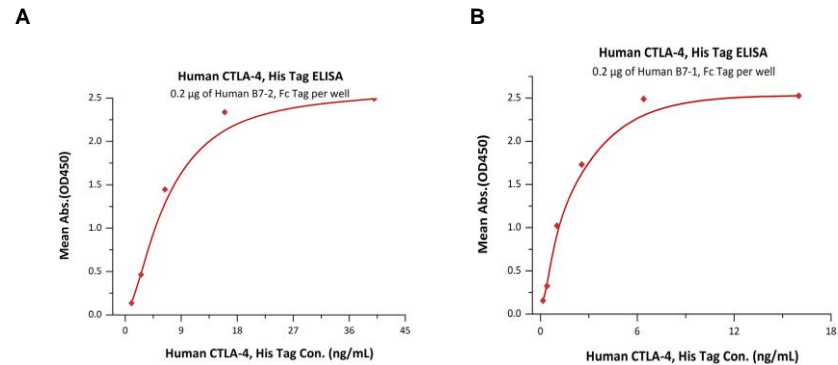


Fig. A. Immobilized Human B7-2, Fc Tag at 2µg/mL (100 µL/well) can bind Human CTLA-4, His Tag with a linear range of 1-6.4 ng/mL

Fig. B. Immobilized Human B7-1, Fc Tag at 2µg/mL (100 µL/well) can bind Human CTLA-4, His Tag with a linear range of 0.16-2.56 ng/mL

RELATED PRODUCTS:

- Human CellExp™ CD223, human recombinant (Cat. No. 7278-10, -50)
- Human CellExp™ CD71, human recombinant (Cat. No. 7279-10, -50)
- Human CellExp™ CD273, human recombinant (Cat. No. 7369-10, -50)
- Human CellExp™ CD33, human recombinant (Cat. No. 7370-10, -50)
- Human CellExp™ CD87, human recombinant (Cat. No. 7372-20, -100)
- Human CellExp™ CD360, human recombinant (Cat. No. 7373-20, -100)
- Human CellExp™ CD244, human recombinant (Cat. No. 7374-10, -50)
- Human CellExp™ CD304, human recombinant (Cat. No. 7375-10)

FOR RESEARCH USE ONLY! Not to be used in humans.