

## Recombinant Mouse CTLA4 Protein (His Tag)

**Catalog Number:** PKSM041001

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

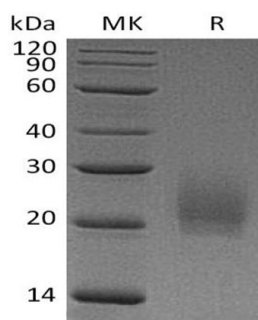
### Description

<b>Species</b>	Mouse
<b>Source</b>	HEK293 Cells-derived Mouse CTLA4 protein Ala37-Asp161, with an C-terminal His
<b>Calculated MW</b>	14.6 kDa
<b>Observed MW</b>	17-30 kDa
<b>Accession</b>	P09793
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
<b>Reconstitution</b>	Please refer to the specific buffer information in the printed manual.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

Mouse Cytotoxic T lymphocyte 4 (CTLA-4, CD152), is a type I transmembrane T cell inhibitory molecule. 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. Within the ECD, Mouse CTLA-4 shares 68% aa sequence identity with human. CTLA4 is similar to the T cell costimulatory protein CD28 since both of the molecules bind to CD80 and CD86 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 play an important role in their functions. T cell activation through the T cell receptor and CD28 leads to increased expression of CTLA4. Genetic variations of CTLA4 have been associated with susceptibility to systemic lupus erythematosus (SLE), Graves disease (GRD), Celiac disease type 3 (CELIAC3) and Hepatitis B virus infection (HBV infection).