

**PRODUCT INFORMATION**

<b>Target</b>	CTLA-4
<b>Synonyms</b>	CTLA4;CD152
<b>Description</b>	Recombinant human CTLA-4 protein with C-terminal human Fc tag
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P16410
<b>Expression Host</b>	HEK293
<b>Tag</b>	C-Human Fc Tag
<b>Molecular Characterization</b>	CTLA-4(Lys36-Asp161) hFc(Glu99-Ala330)
<b>Molecular Weight</b>	The protein has a predicted molecular mass of 39.6 kDa after removal of the signal peptide. The apparent molecular mass of CTLA4-hFc is approximately 40-55 kDa due to glycosylation.
<b>Purity</b>	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
<b>Formulation &amp; Reconstitution</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
<b>Yefei_Storage</b>	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
<b>Background</b>	This gene 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.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



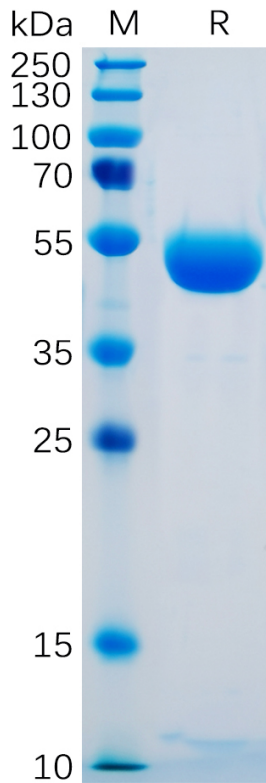


Figure 1. Human CTLA-4 Protein, hFc Tag on SDS-PAGE under reducing condition.

### Human CTLA-4, hFc Tagged protein ELISA

0.2  $\mu\text{g}$  of CTLA-4, hFc Tagged protein per well

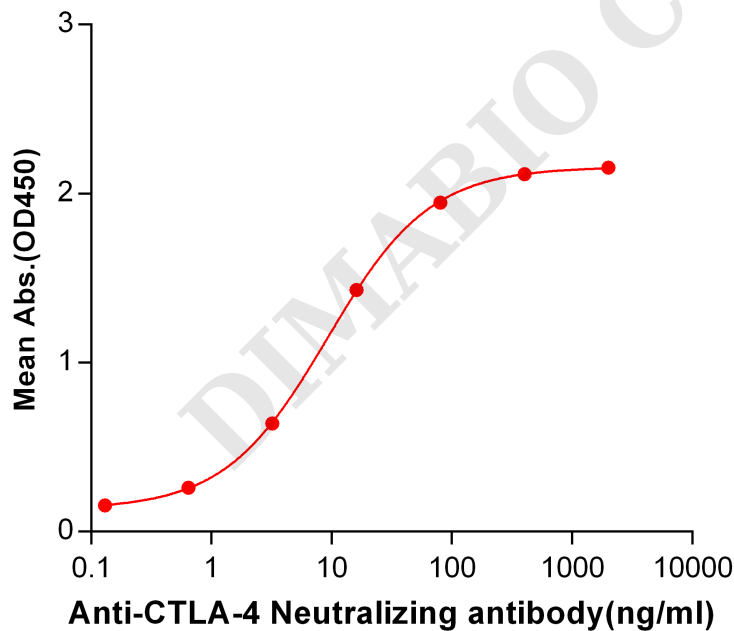


Figure 2. ELISA plate pre-coated by 2  $\mu\text{g}/\text{ml}$  (100  $\mu\text{l}/\text{well}$ ) Human CTLA-4, hFc tagged protein (PME100479) can bind Anti-CTLA4 Neutralizing antibody BME100022 in a linear range of 0.64-80.0 ng/ml.



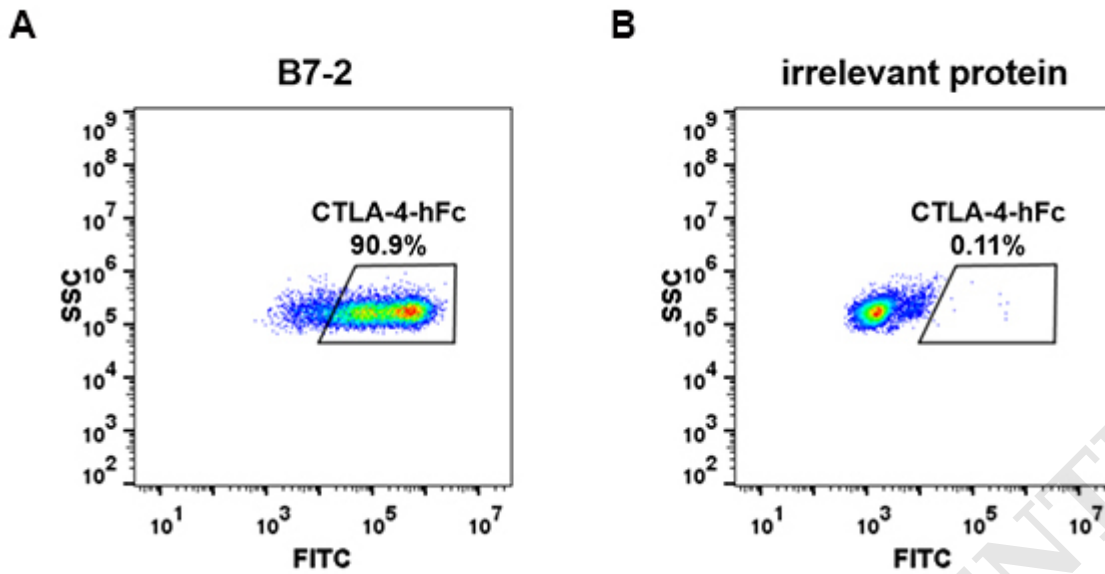


Figure 3. HEK293 cell line transfected with irrelevant protein (B) and human B7-2 (A) were surface stained with Human CTLA4, hFc tagged protein (PME100479) 1 $\mu$ g/ml followed by Alexa 488-conjugated anti-human IgG secondary antibody.

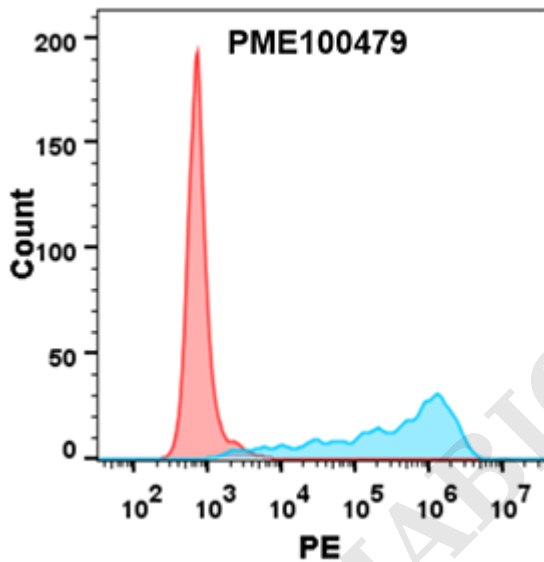


Figure 4. Flow cytometry analysis with 1 $\mu$ g/mL Human CTLA4 Protein, hFc tag (PME100479) on HEK293 cells transfected with human B7-1 (Blue histogram) or HEK293 transfected with irrelevant protein (Red histogram).



## Human CTLA-4, hFc Tagged protein ELISA

0.2  $\mu$ g of CTLA-4, hFc tagged protein per well

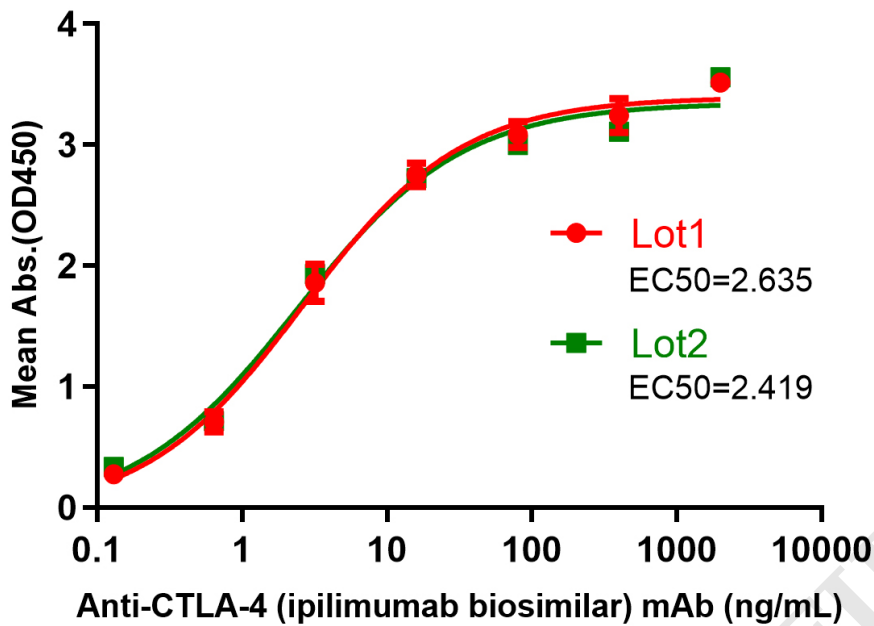


Figure 5. Recombinant human CTLA-4 (Cat# PME100479) has minimal batch-to-batch variability. Independent batches of purified human CTLA-4 protein (Cat# PME100479), including freshly prepared Lot1 and Lot2 stored at  $-20^{\circ}\text{C}$  for five years, show comparable biological activity as measured by ELISA binding assays. Protein activity remains stable after long-term storage.

