

PRODUCT INFORMATION

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| Target | CTLA-4 |
| Synonyms | CTLA4;CD152 |
| Description | Recombinant human CTLA-4 protein with C-terminal human Fc tag |
| Delivery | In Stock |
| Uniprot ID | P16410 |
| Expression Host | HEK293 |
| Tag | C-Human Fc Tag |
| Molecular Characterization | CTLA-4(Lys36-Asp161) hFc(Glu99-Ala330) |
| Molecular Weight | 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. |
| Purity | The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining. |
| Formulation & Reconstitution | 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. |
| Storage&Shipping | 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. |
| Background | 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. |
| Usage | Research use only |
| Conjugate | Unconjugated |



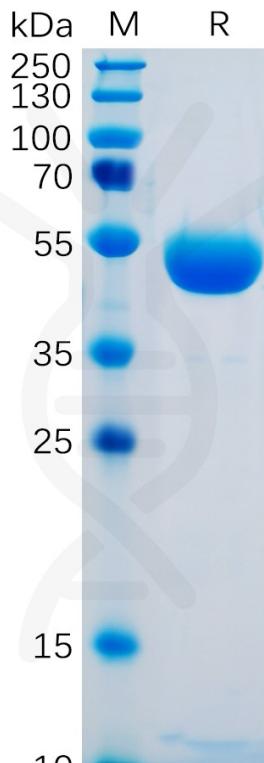


Figure 1. Human CTLA-4 Protein, hFc Tag on SDS-PAGE under reducing condition.

Human CTLA-4, hFc Tagged protein ELISA

0.2 µg of CTLA-4, hFc Tagged protein per well

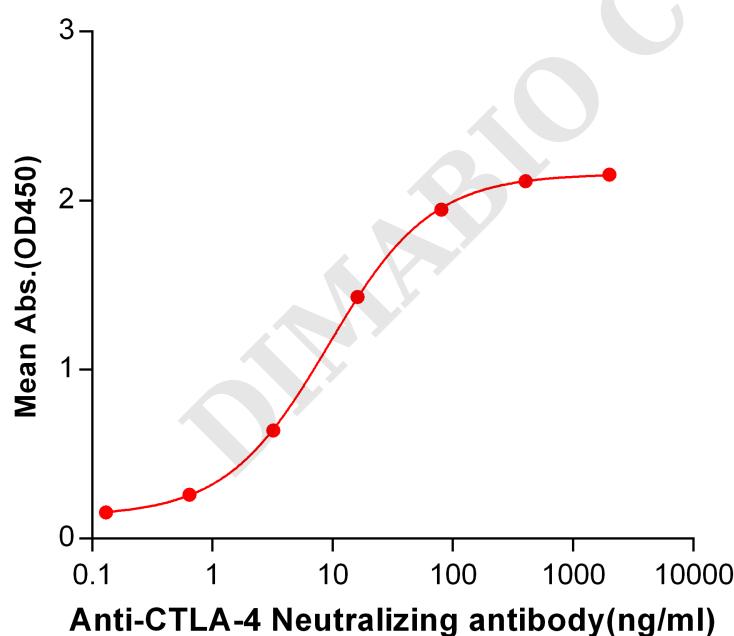


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human CTLA-4, hFc tagged protein (PME100479) can bind Anti-CTLA4 Neutralizing antibody BME100022 in a linear range of 0.64-80.0 ng/ml.



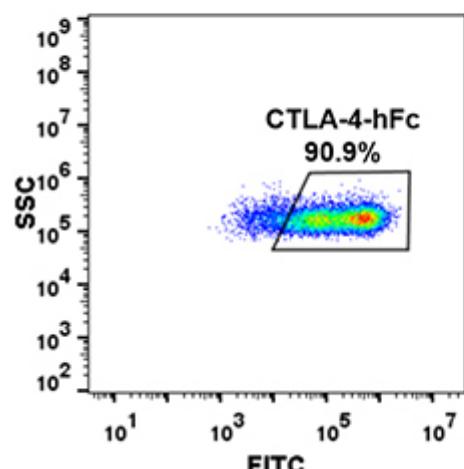
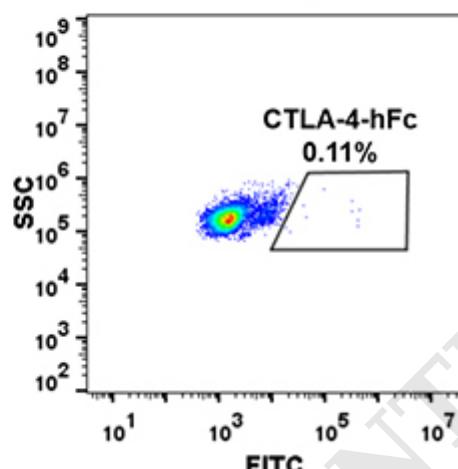
A**B7-2****B****irrelevant protein**

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 μ g/ml followed by Alexa 488-conjugated anti-human IgG secondary antibody.

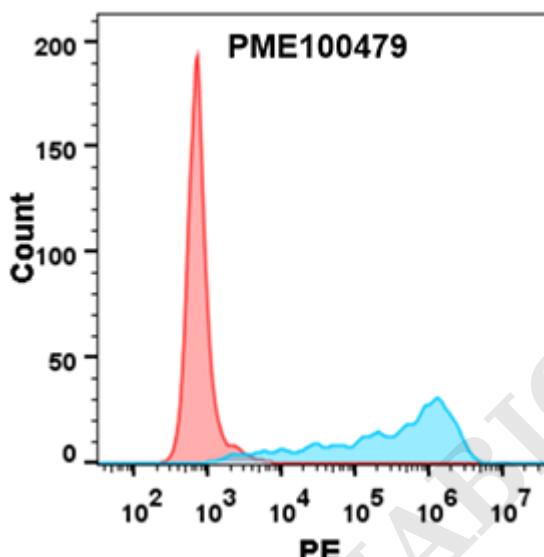


Figure 4. Flow cytometry analysis with 1 μ g/mL Human CTLA4 Protein, hFc tag (PME100479) on HEK293 cells transfected with human B7-1 (Blue histogram) or HEK293 transfected with irrelevant protein (Red histogram).



Human CTLA-4, hFc Tagged protein ELISA

0.2 µg of CTLA-4, hFc tagged protein per well

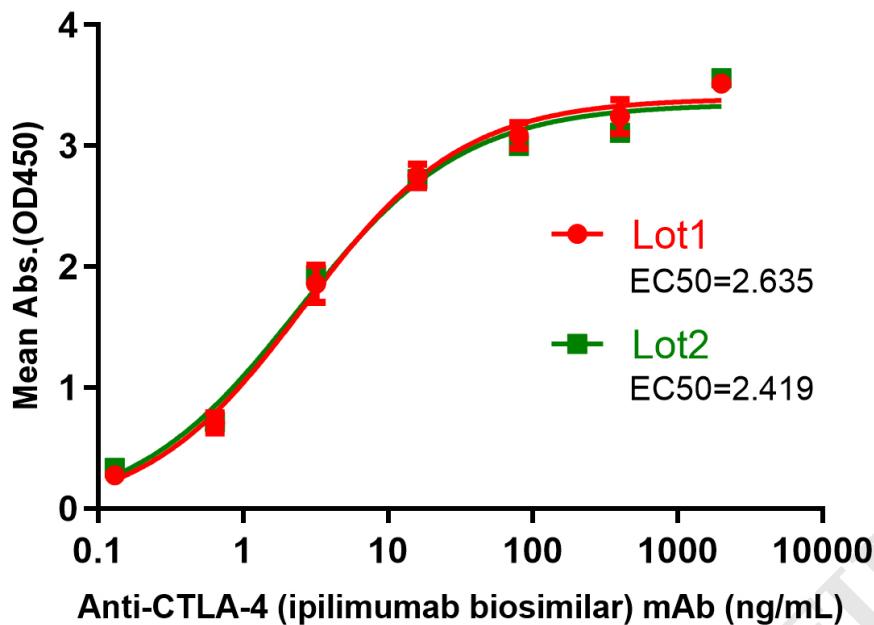


Figure 5. Recombinant human CTLA-4 (Cat# PME100479) has minimal batch-to-batch variability. Independent batches of purified human CTLA-4 protein (Cat# PME100479), including freshly prepared Lot1 and Lot2 stored at -20°C for five years, show comparable biological activity as measured by ELISA binding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

