PRODUCT INFORMATION

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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 μm) prior to use.
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

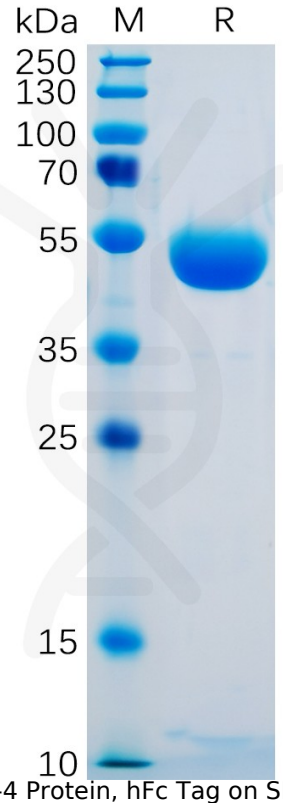

Figure 1. Human CTLA-4 Protein, hFc Tag on SDS-PAGE under reducing condition.

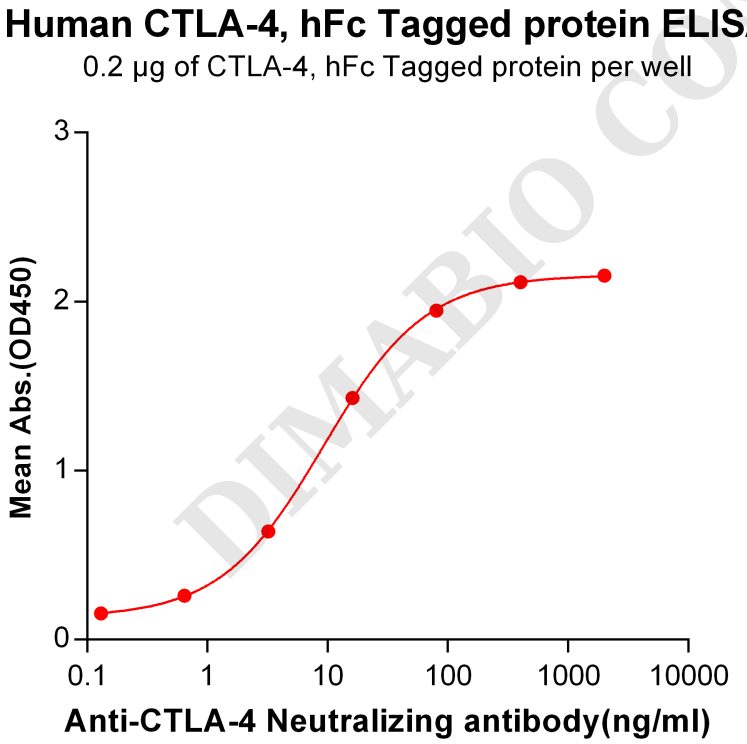

Figure 2. ELISA plate pre-coated by 2 μg/ml (100 μl/well) Human CTLA-4, hFc tagged protein (PME100479) can bind Anti-CTLA4 Neutralizing antibody BME100022 in a linear range of 0.64-80.0 ng/ml.

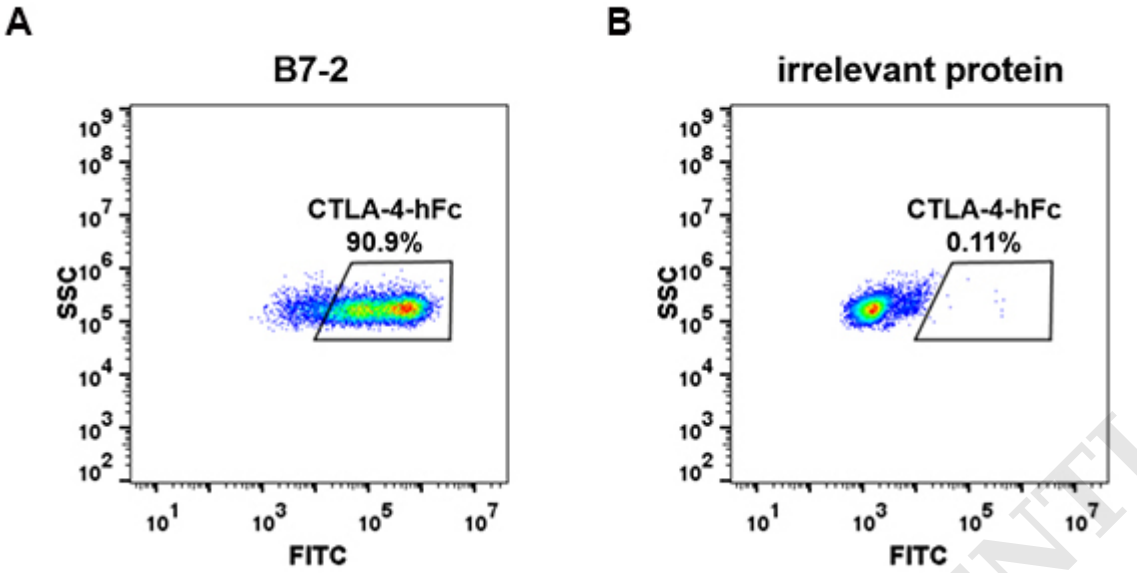

Figure 3. HEK293 cell line transfected with irrelevant protein (B) and human B7-2 (A) were surface stained with Human CTLA4, hFc tagged protein (PME100479) 1μg/ml followed by Alexa 488-conjugated anti-human IgG secondary antibody.

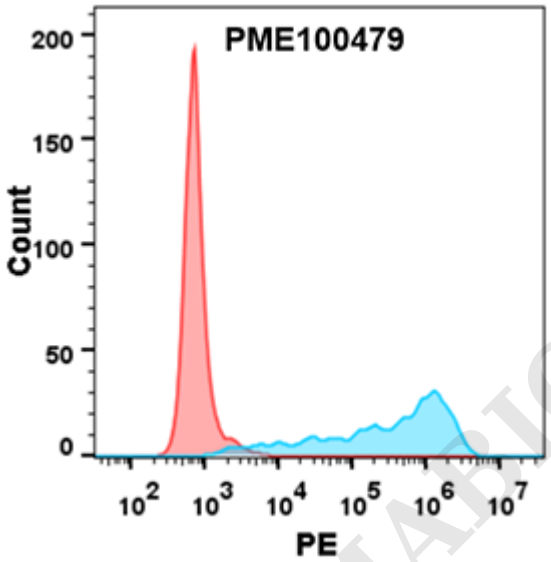

Figure 4. Flow cytometry analysis with 1μg/mL Human CTLA4 Protein, hFc tag (PME100479) on HEK293 cells transfected with human B7-1 (Blue histogram) or HEK293 transfected with irrelevant protein (Red histogram).

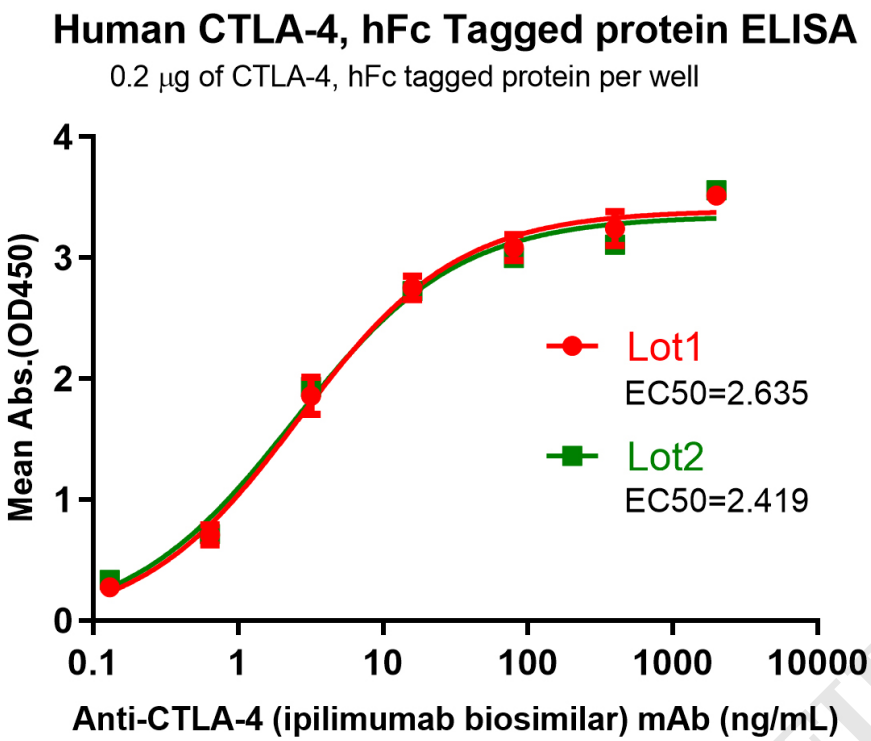

Figure 5. Recombinant human CTLA-4 (Cat# PME100479) has minimal batch-to-batch variability. Independent batches of purified human CTLA-4 protein (Cat# PME100479), including freshly prepared Lot1 and Lot2 stored at −20°C for five years, show comparable biological activity as measured by ELISA binding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