Recombinant CTLA4 protein (His tag)

Catalog Number	537562
Synonyms	Cytotoxic T-lymphocyte-associated antigen 4; CTLA-4; CD antigen CD152
Species	Human
Expression System	E. coli
Accession	P16410
Molecular Weight	Predictes a molecular mass of 15.16 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	36-161
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 36-161 aa (P16410) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human CTLA-4 (Cytotoxic T-lymphocyte-associated antigen 4) Fragment (aa 36-161) is a high-purity protein encompassing the Ig-like V-type domain. This fragment serves as an essential tool for investigating the inhibitory mechanisms of T-cell responses, enabling targeted studies of immune checkpoint regulation. Cytotoxic T-lymphocyte-associated antigen 4 (CTLA-4) is a critical inhibitory receptor that functions as a major negative regulator of T-cell responses. It exhibits significantly stronger affinity for B7 family ligands CD80 and CD86 compared to the stimulatory coreceptor CD28, thereby competitively suppressing T-cell activation. CTLA-4 primarily localizes to the cell membrane as a single-pass type I membrane protein but exists mainly as an intracellular antigen due to tightly regulated surface expression via restricted trafficking and rapid internalization. This recombinant fragment corresponds to the extracellular Ig-like V-type domain, which mediates ligand binding, making it invaluable for structural, binding, and functional studies of immune checkpoint pathways.