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CTLA-4

Catalog # PVGS1552

Product Information

Primary Accession	P16410
Species	Human
Sequence	Ala37-Phe162
Purity	> 98% as analyzed by SDS-PAGE
Endotoxin Level	
Biological Activity	Assay #1: Measured by its ability to inhibit IL-2 secretion by co-culturing stimulated Jurkat human acute T cell leukemia cells and CD80 expression CHO stable cell line. Assay #2: Immobilized B7-2(CD86), His, Human (Cat. No.: Z03452) at 2.0 g/ml (100 l/well) can bind CTLA-4, hFc, Human.
Expression System	CHO
Formulation	Lyophilized from a 0.2 m filtered solution in PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	1493
Other Names	Cytotoxic T-lymphocyte protein 4, Cytotoxic T-lymphocyte-associated antigen 4, CTLA-4, CD152, CTLA4, CD152
Target Background	Cytotoxic T lymphocyte-associated molecule-4 (CTLA-4) is a cell surface molecule that is closely related to CD28, and a powerful negative regulator of T cell activation. Structurally, CTLA-4 is a member of the Ig superfamily, having a single extracellular V-like domain , homology with CD28; The overall sequence homology between CD28 and CTLA-4 is about 20%, but they share a 27% (murine) to 31% (human) identity at the amino acid level. Inhibitory receptor acting as a major negative regulator of T-cell responses. The affinity of CTLA-4 for its natural B7 family ligands, CD80 and CD86, is considerably stronger than the affinity of their cognate stimulatory coreceptor CD28.

Protein Information

Name	CTLA4
Synonyms	CD152
Function	Inhibitory receptor acting as a major negative regulator of T-cell responses (PubMed:11279501, PubMed:11279502, PubMed:16551244, PubMed:1714933, PubMed:18641304, PubMed:28484017). Acts as a decoy receptor: the affinity of CTLA4 for its natural B7 family ligands, CD80 and CD86, is considerably stronger than the affinity of their cognate stimulatory coreceptor CD28 (PubMed:11279501, PubMed:11279502, PubMed:16551244, PubMed:1714933, PubMed:28484017).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Note=Exists primarily an intracellular antigen whose surface expression is tightly regulated by restricted trafficking to the cell surface and rapid internalization
Tissue Location	Widely expressed with highest levels in lymphoid tissues. Detected in activated T-cells where expression levels are 30- to 50-fold less than CD28, the stimulatory coreceptor, on the cell surface following activation.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.