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CTLA-4

Catalog # PVGS1552

Specification

CTLA-4 - Product Information

Primary Accession P16410

Species
Human

Sequence
Ala37-Phe162

Purity
> 98% as analyzed by SDS-PAGE

Endotoxin Level
< 0.2 EU/ µg of protein by gel clotting method

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 µg/ml (100 µl/well) can bind CTLA-4, hFc, Human.

Expression System
CHO

Formulation **Lyophilized from a 0.2 µm 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 µg/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.

CTLA-4 - 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.

CTLA-4 - Protein Information

Name CTLA4

Synonyms CD152

Function
Inhibitory receptor acting as a major negative regulator of T-cell responses. 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.

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.

CTLA-4 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CTLA-4 - Images