

CTLA4 Antibody [2G10]

Catalog # ASC12128

Specification

CTLA4 Antibody [2G10] - Product Information

Application Primary Accession Other Accession Host Clonality Isotype Calculated MW WB, IHC-P, IF, ICC, E <u>P16410</u> <u>NP_005205</u> Mouse Monoclonal IgG1 Predicted: 25 kDa

Observed: 32 kDa KDa

CTLA4 Antibody [2G10] - Additional Information

Gene ID1493Alias SymbolCTLA4Other NamesCTLA-4 Antibody: CTL4, cytotoxic T-lymphocyte associated protein 4, CD, GSE, GRD4, ALPS5,
CD152, IDDM12, CELIAC3

Reconstitution & Storage

CTLA-4 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

CTLA4 Antibody [2G10] is for research use only and not for use in diagnostic or therapeutic procedures.

CTLA4 Antibody [2G10] - 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.

CTLA4 Antibody [2G10] - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

CTLA4 Antibody [2G10] - Images

CTLA4 Antibody [2G10] - Background

The cytotoxic T-lymphocyte-associated protein 4 (CTLA-4), also known as CD152, is a member of the immunoglobulin superfamily that is expressed by activated T cells and transmits an inhibitory signal to T cells (1,2). Both it and the homologous T-cell co-stimulatory protein CD28 bind to CD80 (B7-H1) and CD86 (B7-H2) on antigen-presenting cells (APCs) (3). Mutations in the CTLA-4 gene have been implicated in multiple autoimmune diseases (4). CTLA-4 also functions as an immune checkpoint protein, and anti- CTLA-4 antibodies have been successfully used in the treatment of cancer (5).

CTLA4 Antibody [2G10] - References

Brunet JF, Denizot F, Luciani MF, et al. A new member of the immunoglobulin superfamily--CTLA-4. Nature 1987; 328:267–70.Walunas TL, Lenschow DJ, Bakker CY, et al. CTLA-4 can function as a negative regulator of T cell activation. Immunity 1994; 1:405–13.Harding FA, McArthur JG, Gross JA, et al. CD28-mediated signalling co-stimulates murine T cells and prevents induction of anergy in T-cell clones. Nature 1992; 356:607–9.Romo-Tena J, Gomez-Martin D, and Alcocer-Verela J. CTLA-4 and autoimmunity: new insights into the dual regulator of tolerance. Autoimmun. Rev. 2013; 12:117.