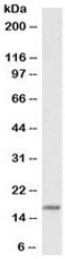
CD83 Antibody Goat Polyclonal (R36439)

Catalog No.	Formulation	Size
R36439-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	9308
Applications	Western blot: 1-3ug/ml ELISA (peptide) LOD: 1:4000
Limitations	This CD83 antibody is available for research use only.



Western blot testing of human Daudi cell lysate with CD83 antibody at 1ug/ml. Predicted molecular weight: ~22/22/17 kDa (isoforms a/b/c). The glycosylated form of the protein is visualized at 40-60 kDa.

Description

CD83 Antibody Goat Polyclonal recognizes CD83 molecule, a type I transmembrane glycoprotein belonging to the immunoglobulin superfamily that is predominantly expressed on mature dendritic cells. CD83 is widely regarded as a hallmark marker of dendritic cell maturation and immune activation. In addition to dendritic cells, CD83 expression can be detected on activated B cells, activated T cells, and certain epithelial cells under inflammatory conditions. Because of this regulated expression pattern, CD83 Antibody Goat Polyclonal is commonly used in research focused on antigen presentation, adaptive immunity, and immune response modulation.

The CD83 gene is located on chromosome 6p23 and encodes a protein composed of a single extracellular immunoglobulin-like domain, a transmembrane region, and a short cytoplasmic tail involved in intracellular signaling. CD83 plays a functional role in regulating T cell activation and supporting the development of regulatory T cells, thereby contributing to immune tolerance and homeostasis. A soluble form of CD83 has also been described and is thought to possess immunoregulatory properties. CD83 Antibody Goat Polyclonal supports investigations into dendritic cell biology, immune signaling pathways, and inflammatory mechanisms.

In normal human tissues, CD83 expression is most prominent in secondary lymphoid organs such as lymph node, tonsil, and spleen, where mature dendritic cells are localized within T cell-rich zones. Expression is typically upregulated following exposure to pro-inflammatory cytokines, pathogen-associated molecular patterns, and other immune stimuli that drive dendritic cell maturation. CD83 Antibody Goat Polyclonal is therefore useful for evaluating immune activation states and characterizing antigen-presenting cell populations in research models.

Aberrant or ectopic CD83 expression has been reported in certain hematologic malignancies, including Hodgkin lymphoma and subsets of B cell lymphomas, as well as within tumor microenvironments where activated immune infiltrates are present. Detection of CD83-positive cells can assist in studying tumor-immune interactions and immune surveillance mechanisms. By recognizing multiple epitopes on the CD83 protein, this goat polyclonal antibody provides robust signal detection and can facilitate analysis of both membrane-bound and soluble CD83 forms in research applications.

CD83 Antibody Goat Polyclonal offers a reliable reagent for investigating dendritic cell maturation, immune tolerance, and adaptive immune responses. Its broad epitope recognition enhances sensitivity and supports detailed examination of CD83 expression patterns in immunologic and translational research settings.

Application Notes

Optimal dilution of the CD83 antibody should be determined by the researcher.

Immunogen

Amino acids TTSCNSGTYR were used as the immunogen for this CD83 antibody. This sequence is common to isoforms a/b/c.

Storage

Aliquot and store the CD83 antibody at -20oC.

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