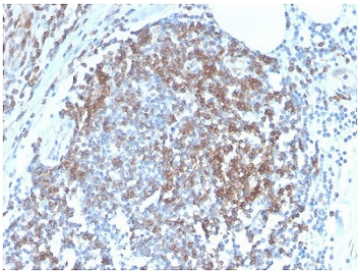
Recombinant CD6 Antibody [clone C6/2884R] (V7379)

Catalog No.	Formulation	Size
V7379-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7379-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7379SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7379IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

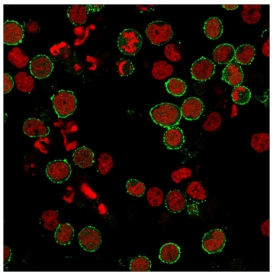
Recombinant RABBIT MONOCLONAL

Bulk quote request

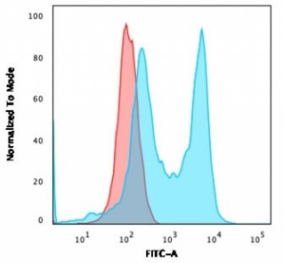
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	C6/2884R
Purity	Protein A affinity chromatography
UniProt	P30203
Localization	Cell surface and Cytoplasmic
Applications	Flow cytometry: 1-2ug/ml Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Limitations	This recombinant CD6 antibody is available for research use only.



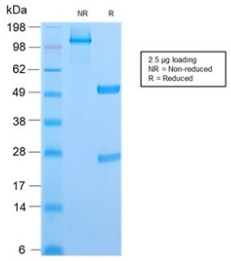
IHC staining of FFPE human tonsil tissue with recombinant CD6 antibody (clone C6/2884R). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



Immunofluorescent staining of human MOLT4 cells with CD6 antibody (clone C6/2884R, green) and Reddot nuclear stain (red).



Flow cytometry testing of human MOLT4 cells with CD6 antibody (clone C6/2884R); Red=isotype control, Blue= CD6 antibody.



SDS-PAGE analysis of purified, BSA-free recombinant CD6 antibody (clone C6/2884R) as confirmation of integrity and purity.

Description

Recombinant CD6 antibody targets CD6, a type I transmembrane glycoprotein expressed primarily on the surface of mature T lymphocytes and a subset of B cells. CD6, also known as T cell differentiation antigen CD6, is localized to the plasma membrane and plays an important role in immune cell communication, particularly during T cell activation and immune synapse formation. Detection of CD6 expression is commonly used to study T cell biology and immune signaling dynamics.

CD6 is a member of the scavenger receptor cysteine rich superfamily and contains three extracellular scavenger receptor cysteine rich domains, a single transmembrane segment, and a cytoplasmic tail involved in intracellular signaling. The extracellular domains mediate interactions with ligands such as activated leukocyte cell adhesion molecule, promoting stable adhesion between T cells and antigen-presenting cells. These interactions contribute to modulation of T cell receptor signaling strength and duration during immune responses.

Functionally, CD6 acts as a regulatory receptor that fine-tunes T cell activation, proliferation, and cytokine production following antigen recognition. The cytoplasmic region of CD6 associates with multiple signaling adaptors, linking ligand engagement to downstream signaling pathways that influence immune cell fate decisions. Through these mechanisms, CD6 helps balance effective immune defense with prevention of excessive immune activation.

CD6 expression is maintained throughout T cell development and is enriched in lymphoid tissues such as thymus, spleen, and lymph nodes. Its expression pattern is consistent with a role in T cell selection, peripheral immune surveillance, and adaptive immune regulation. Dysregulation of CD6-mediated signaling has been investigated in the context of autoimmune and inflammatory disorders, where altered T cell activation contributes to disease pathology.

Recombinant CD6 antibody reagents, including clone C6/2884R, are useful tools for detecting CD6 expression and distribution in immune cells and tissues. Clone C6/2884R is designed to recognize CD6 in research applications,

supporting studies of T cell activation, immune receptor expression, and cell-cell interactions within the immune system.

Application Notes

The optimal dilution of the recombinant CD6 antibody for each application should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Human recombinant protein was used as the immunogen for this recombinant CD6 antibody.

Storage

Store the recombinant CD6 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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