abcam

ab34070

Anti-CD5 antibody [CC17]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.09% Sodium azide
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing CD5 protein. The exact immunogen used to generate this antibody is proprietary information. Database link P19238
Clone number	CC17
Purification technique	Affinity purification Protein G
Specificity	ab34070 is specific for bovine CD5. This clone reacts with BoCD5.1, which is a polymorphic antigen expressed on cells of all Bos Taurus animals and a small proportion of Bos Indicus animals.

Reactivity data

Flow Cyt

Tested

Species	Cow
Dilution info	10 µL for 10^6 Cells
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target data

See full target information CD5

Function	May act as a receptor in regulating T-cell proliferation.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CD5 also known as T1 or Leu-1 is a glycoprotein with a molecular mass of approximately 67 kDa. It is expressed mainly on the surface of T cells and a subset of B cells. CD5 plays a major role in the regulation of immune responses. It functions by modulating T-cell receptor (TCR) signaling often acting as a negative regulator to prevent excessive immune activation. Researchers often utilize CD5 antibodies such as those conjugated with PerCP for immunohistochemistry (IHC) to study this protein's expression and distribution.
Biological function summary	CD5 is essential in the immune system's ability to maintain tolerance to self-antigens thereby preventing autoimmune responses. CD5 forms part of a receptor complex on the cell surface that interacts with ligands and other receptors to fine-tune immune cell signaling. Its localization and function in T cells relate closely to its ability to modulate signaling pathways essential for cell survival and proliferation. This modulation is important for ensuring that immune responses are appropriate to the stimuli encountered.
Pathways	CD5 is involved in signal transduction processes important for immune tolerance and modulation. It intersects with pathways like the T cell receptor (TCR) signaling pathway and the NF-kB signaling pathway. These pathways involve interaction with proteins like Zap70 a tyrosine kinase related to TCR signaling and the downstream activation of transcription factors that regulate immune responses. The protein

	CRIS1 also appears in some pathway interactions highlighting the interconnected nature of immune regulatory proteins.
Associated diseases and disorders	CD5 has significant associations with autoimmune diseases such as systemic lupus erythematosus (SLE) where its modulatory role can affect autoantibody production. Additionally CD5 in conjunction with proteins like OX19 correlates with certain lymphoproliferative disorders including chronic lymphocytic leukemia (CLL). In these disorders the expression and function of CD5 may impact disease progression and patient response to therapy making it a potential target for intervention in immune-related conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

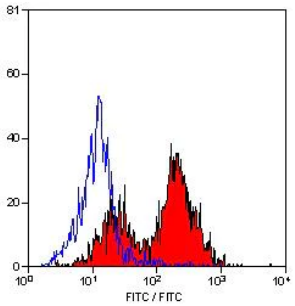
We do not recommend this combination. It is not covered by our product promise.

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1 product image



Flow Cytometry - Anti-CD5 antibody [CC17] (ab34070)

CD5 Flow Cytometry staining using mouse Anti-CD5 antibody

Staining of bovine peripheral blood lymphocytes with Mouse anti Bovine CD5.

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