abcam

ab192342

Anti-CD101 antibody [BB27]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.098% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing CD101 protein. The exact immunogen used to generate this antibody is proprietary information. Database link Q93033
Clone number	BB27
Purification technique	Affinity purification Protein A
Specificity	The mouse monoclonal antibody BB27 recognizes an extracellular epitope of CD101, a 140 kDa disulfidebonded homodimeric protein expressed on activated T cells, and some other cell types, such as granulocytes and cells of the monocyte/macropgage lineage.
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	ab192342 was purified from hybridoma culture supernatant by protein-A affinity chromatography.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1-4 µg/mL
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target data

See full target information CD101

Function	Plays a role as inhibitor of T-cells proliferation induced by CD3. Inhibits expression of IL2RA on activated T-cells and secretion of IL2. Inhibits tyrosine kinases that are required for IL2 production and cellular proliferation. Inhibits phospholipase C-gamma-1/PLCG1 phosphorylation and subsequent CD3-induced changes in intracellular free calcium. Prevents nuclear translocation of nuclear factor of activated T-cell to the nucleus. Plays a role in the inhibition of T-cell proliferation via IL10 secretion by cutaneous dendritic cells. May be a marker of CD4(+) CD56(+) leukemic tumor cells.

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	CD101 also known as IGSF2 or V7 is a transmembrane protein that weighs approximately 140 kDa. This protein is part of the immunoglobulin superfamily and is expressed on the surface of certain immune cells including dendritic cells macrophages monocytes and regulatory T cells. Researchers have also detected CD101 on some subsets of B cells. The protein has a significant role in the

	modulation of immune responses and functions as a marker in immune system studies.
Biological function summary	CD101 influences the immune response through its regulatory effects on cell signaling and interaction. The protein's function often centers within a complex environment contributing to the inhibitory signaling pathways that help balance immune activation. Its presence on regulatory T cells suggests a role in suppressing overactive immune responses which is important to maintaining immune homeostasis. Researchers associate CD101 expression with the control of inflammatory processes highlighting its functional significance.
Pathways	Research shows that CD101 participates in pathways key to immune regulation such as the T-cell receptor signaling pathway. This involvement connects CD101 with proteins like CD3 and CD4 emphasizing its role in modulating T-cell response. The protein plays a part in downstream signaling events that fine-tune immune responses by dampening excessive activation therefore helping prevent autoimmune reactions. It ensures the immune system effectively targets pathogens without harming host tissues.
Associated diseases and disorders	Studies correlate CD101 expression with autoimmune diseases and inflammatory diseases including inflammatory bowel disease (IBD). These associations suggest a potential protective role of CD101 in managing chronic inflammation. Scientists have also observed interactions with proteins like TNF-alpha in these contexts reflecting the complex interplay CD101 has with pro-inflammatory cytokines. Understanding CD101's involvement in disease processes can aid in developing therapeutic strategies that aim to modulate immune responses effectively.

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

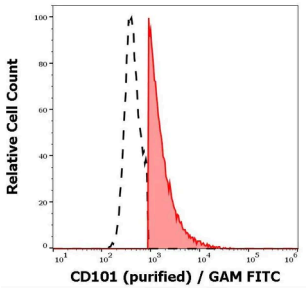
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

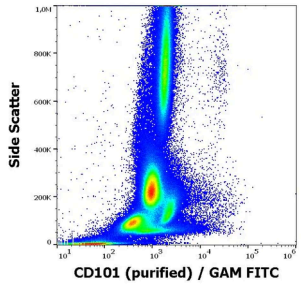
3 product images



Flow Cytometry - Anti-CD101 antibody [BB27] (ab192342)

CD101 Flow Cytometry staining using mouse Anti-CD101 antibody

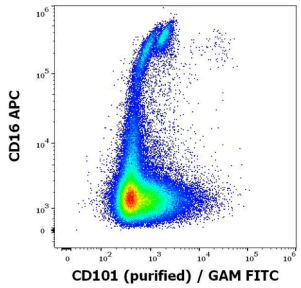
Separation of human CD101 positive CD16 negative lymphocytes (red-filled) CD101 negative CD16 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood using ab192342 (concentration in sample 0.56 µg/ml, GAM FITC).



Flow Cytometry - Anti-CD101 antibody [BB27] (ab192342)

CD101 Flow Cytometry staining using mouse Anti-CD101 antibody

Flow cytometry surface staining pattern of human peripheral whole blood stained using ab192342 (concentration in sample 0.56 µg/ml, GAM FITC).



Flow Cytometry - Anti-CD101 antibody [BB27] (ab192342)

CD101 Flow Cytometry staining using mouse Anti-CD101 antibody

Flow cytometry multicolor surface staining of human lymphocytes stained using ab192342 (concentration in sample 0.56 µg/ml, GAM FITC) and anti-human CD16 (3G8) APC antibody (10 µl reagent / 100 µl of peripheral whole blood).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.