abcam

ab267554

Alexa Fluor® 488 Anti-IL2 Receptor beta/p75 antibody [EPR22892-2]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR22892-2
Purification technique	Affinity purification Protein A

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/500

Notes	-

ICC/IF

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information IL2RB

Function	Receptor for interleukin-2. This beta subunit is involved in receptor mediated endocytosis and transduces the mitogenic signals of IL2. Probably in association with IL15RA, involved in the stimulation of neutrophil phagocytosis by IL15 (PubMed:15123770, PubMed:31040185).

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, Store in the dark

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

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Supplementary info

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

Activity summary	The IL2 Receptor beta also known as IL-2R beta IL2R beta or CD122/IL2RB protein is a component of the interleukin-2 receptor complex. It is part of the receptor system for the cytokine IL-2. This receptor subunit has a molecular mass of approximately 75 kDa and gets alternatively referred to as IL2R beta or p75. It is expressed on the surface of activated T cells natural killer (NK) cells and in some cases myeloid lineage cells. This expression pattern correlates IL2R beta's role in essential immune functions and signaling processes.
Biological function summary	IL2R beta plays a critical role in cytokine binding and signal transduction for the interleukin-2 receptor which is a heterodimeric complex. This complex consists of the IL-2 receptor alpha (CD25) IL-2 receptor beta and a common gamma chain (γc CD132). The presence of IL-2R beta allows the receptor to mediate biological processes like cell proliferation differentiation and survival particularly within the immune system. The extent to how IL2R beta integrates into these processes makes it an important player in immune regulation and homeostasis.
Pathways	IL2R beta serves essential functions in the JAK-STAT and PI3K-AKT pathways. The binding of IL-2 to its receptor initiates a cascade of intracellular events which involve Janus kinases (JAKs) and signal transducer and activator of transcription (STATs) leading to transcriptional activation of various genes. Along with these pathways IL2R beta also interacts collaboratively with the gamma chain (γc) in promoting Downstream signaling events which enhance cell proliferation and survival.
Associated diseases and disorders	IL2R beta's function has implications in autoimmune diseases and certain types of leukemia. Alterations or dysregulation in IL-2R signaling pathways often play a role in autoimmune conditions due to its importance in maintaining immune tolerance. Moreover given IL-2 receptor's role in T-cell and NK-cell activity aberrations may

contribute to uncontrolled cellular proliferation seen in leukemia. Understanding its interplay with the common gamma chain (CD132) can provide insights into therapeutic interventions targeting these disorders.

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

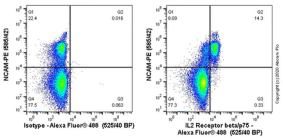
We do not recommend this combination. It is not covered by our product promise.

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.

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1 product image



Flow Cytometry - Alexa Fluor® 488 Anti-IL2 Receptor beta/p75 antibody [EPR22892-2] (ab267554)

IL2 Receptor beta/p75 Flow Cytometry staining using rabbit Anti-IL2 Receptor beta/p75 antibody

Flow cytometry staining of human peripheral blood mononuclear cells (PBMCs) with ab267554 (right) or Rabbit IgG (monoclonal) Alexa Fluor 488®(ab199091) isotype (left).
PBMCs were incubated for 30 min on ice in 1x PBS containing 10µg/ml human IgG and 10 % normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab267554) or Rabbit IgG (monoclonal) Alexa Fluor 488® (ab199091) isotype (100µl at 1µg/ml (1/500 dilution)) for 30 min on ice. The cells were simultaneously stained with NCAM.

Acquisition of >30,000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter. Events were gated on live single cells.

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