abcam

ab326541

PE Anti-IL-2 Receptor alpha antibody [35C3]

Key facts

Isotype	IgG2b
Host species	Mouse
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.4 Preservative: 0.098% Sodium azide Constituents: PBS, 0.2% BSA
Form	Liquid
Clonality	Monoclonal
Clone number	35C3
Purification technique	Size-exclusion chromatography
Specificity	The mouse monoclonal antibody 35C3 recognizes human interleukin 2 (IL-2; secreted or intracellular).
Light chain type	kappa
Purification notes	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Reactivity data

Flow Cyt

Tested

Species	Human

Dilution info	-
Notes	Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests. Intracellular staining.

Target data

See full target information IL2

Function	Cytokine produced by activated CD4-positive helper T-cells and to a lesser extend activated CD8-positive T-cells and natural killer (NK) cells that plays pivotal roles in the immune response and tolerance (PubMed:6438535). Binds to a receptor complex composed of either the high-affinity trimeric IL-2R (IL2RA/CD25, IL2RB/CD122 and IL2RG/CD132) or the low-affinity dimeric IL-2R (IL2RB and IL2RG) (PubMed:16293754, PubMed:16477002). Interaction with the receptor leads to oligomerization and conformation changes in the IL-2R subunits resulting in downstream signaling starting with phosphorylation of JAK1 and JAK3 (PubMed:7973659). In turn, JAK1 and JAK3 phosphorylate the receptor to form a docking site leading to the phosphorylation of several substrates including STAT5 (PubMed:8580378). This process leads to activation of several pathways including STAT, phosphoinositide-3-kinase/PI3K and mitogen-activated protein kinase/MAPK pathways (PubMed:25142963). Functions as a T-cell growth factor and can increase NK-cell cytolytic activity as well (PubMed:6608729). Promotes strong proliferation of activated B-cells and subsequently immunoglobulin production (PubMed:6438535). Plays a pivotal role in regulating the adaptive immune system by controlling the survival and proliferation of regulatory T-cells, which are required for the maintenance of immune tolerance. Moreover, participates in the differentiation and homeostasis of effector T-cell subsets, including Th1, Th2, Th17 as well as memory CD8-positive T-cells.

Storage

Shipped at conditions	Ambient - Can Ship with Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze, Store in the dark

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

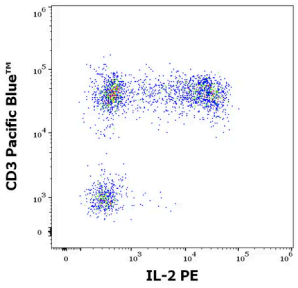
We do not recommend this combination. It is not covered by our product promise.

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.

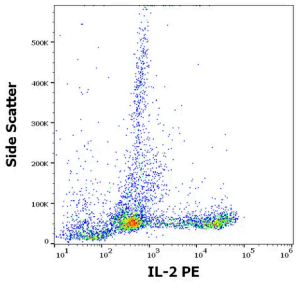
3 product images



Flow Cytometry - PE Anti-IL-2 Receptor alpha antibody [35C3] (ab326541)

IL-2 Receptor alpha Flow Cytometry staining of PMA + Ionomycin stimulated and Brefeldin A treated human lymphocytes using mouse Anti-IL-2 Receptor alpha antibody

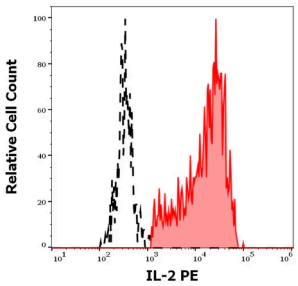
Flow cytometry multicolor surface staining pattern of PMA + Ionomycin stimulated and Brefeldin A treated human lymphocytes using anti-human CD3 (UCHT1) Pacific Blue™ antibody (4 µl reagent / 100 µl of peripheral whole blood) and intracellular staining using ab326541 (10 µl reagent / 100 µl of peripheral whole blood).



Flow Cytometry - PE Anti-IL-2 Receptor alpha antibody [35C3] (ab326541)

IL-2 Receptor alpha Flow Cytometry staining of PMA + Ionomycin stimulated and Brefeldin A treated human peripheral whole blood using mouse Anti-IL-2 Receptor alpha antibody

Flow cytometry intracellular staining pattern of PMA + Ionomycin stimulated and Brefeldin A treated human peripheral whole blood stained using ab326541 (10 µl reagent / 100 µl of peripheral whole blood).



Flow Cytometry - PE Anti-IL-2 Receptor alpha antibody [35C3] (ab326541)

IL-2 Receptor alpha Flow Cytometry staining of PMA + Ionomycin stimulated and Brefeldin A treated human peripheral whole blood using mouse Anti-IL-2 Receptor alpha antibody

Separation of human IL-2 positive CD3 positive lymphocytes (red-filled) from IL-2 negative CD3 negative lymphocytes (black-dashed) in flow cytometry analysis (intracellular staining) of PMA + Ionomycin stimulated and Brefeldin A treated human peripheral whole blood stained using ab326541 (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'.