abcam

ab314188

Anti-KLRG1 antibody [8E11]

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.88% Sodium chloride
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human KLRG1. Database link Q96E93
Clone number	8E11
Purification technique	Affinity purification
Concentration	0.85 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/50 - 1/200
Notes	-

Target data

See full target information KLRG1

Function	Plays an inhibitory role on natural killer (NK) cells and T-cell functions upon binding to their non-MHC ligands. May mediate missing self recognition by binding to a highly conserved site on classical cadherins, enabling it to monitor expression of E-cadherin/CDH1, N-cadherin/CDH2 and R-cadherin/CDH4 on target 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

Notes

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.

Supplementary info

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

Activity summary	KLRG1 also known as killer cell lectin-like receptor G1 is a protein with a mass of about 30 kDa. It functions mechanically as an inhibitory receptor on natural killer (NK) cells and subsets of T cells. KLRG1 binds to classical cadherins like E-cadherin and N-cadherin modulating immune cell activity. Expression of KLRG1 is found

	mainly on mature NK cells and activated T cells particularly on those with an effector memory phenotype. Detecting KLRG1 expression often involves flow cytometry techniques using specific anti-KLRG1 antibodies.
Biological function summary	KLRG1 serves as a modulator of immune responses by delivering inhibitory signals that regulate immune cell cytotoxicity and cytokine production. It is not part of a larger protein complex but interacts with other molecules on the cell surface to perform its role. The engagement of its ligands mediates the reduction of immune responses which is important during chronic infections and cancer to prevent excessive immune activation.
Pathways	Several immune regulatory pathways involve KLRG1. It notably participates in the balance between immune activation and inhibition within the immune system. KLRG1 interacts with signaling pathways such as those regulated by T-cell receptor (TCR) signaling and NK cell activation. Related proteins in these pathways include CD226 and NKG2A which also play a role in determining the immune cell response.
Associated diseases and disorders	KLRG1 has relevance in chronic infections and cancer due to its role in regulating immune cell activity. In chronic viral infections such as HIV and hepatitis KLRG1 expression is upregulated coinciding with T cell exhaustion. This marker is also significant in cancer where it contributes to the immune evasion mechanisms of tumors. The association with other proteins like PD-1 and TIM-3 further highlights KLRG1's function in these contexts serving as potential targets for therapeutic intervention.

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

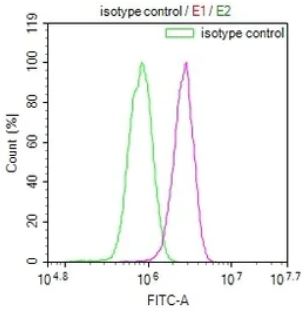
We do not recommend this combination. It is not covered by our product promise.

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:

1 product image



Flow Cytometry - Anti-KLRG1 antibody [8E11] (ab314188)

KLRG1 Flow Cytometry staining of A549 cells using rabbit Anti-KLRG1 antibody

Overlay Peak curve showing A549 (Human lung carcinoma cell line) cells stained with ab314188 (pink line) at 1:100. The cells were incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1x10E6 cells) for 45min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG (H+L) at 1:200 dilution for 35min at 4°C. Control antibody (green line) was rabbit IgG (1ug/1x10E6 cells) used under the same conditions. Acquisition of >10,000 events was performed.

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