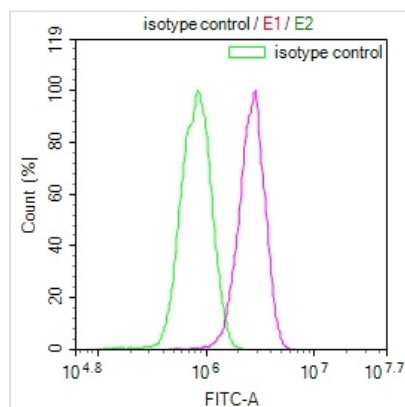




KLRG1 Recombinant Monoclonal Antibody

Product Code	CSB-RA233042A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q96E93
Immunogen	A synthesized peptide derived from human KLRG1
Species Reactivity	Human
Tested Applications	ELISA, FC; Recommended dilution: FC:1:50-1:200
Relevance	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. {ECO:0000269 PubMed:19604491}.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Immunology
Gene Names	KLRG1
Clone No.	8E11

Image



Overlay Peak curve showing A549 cells surface stained with CSB-RA233042A0HU (red 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/1*10⁶cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?. Control antibody (green line) was rabbit IgG (1ug/1*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

To create the KLRG1 recombinant monoclonal antibody, several steps are



involved. The KLRG1 monoclonal antibody is first harvested and its gene sequence is determined. A vector carrying the KLRG1 monoclonal antibody gene is then constructed and transfected into a host cell line for culture. During the production of the KLRG1 monoclonal antibody, a synthesized peptide from human KLRG1 acts as the immunogen. Affinity chromatography is used to purify the KLRG1 recombinant monoclonal antibody, which is then evaluated for specificity through ELISA and FC applications.

KLRG1 is a type II transmembrane protein that belongs to the C-type lectin superfamily. It is mainly expressed on the surface of natural killer (NK) cells, T cells, and some memory B cells. KLRG1 is involved in regulating the immune response by inhibiting the activation of NK cells and T cells. Specifically, KLRG1 acts as an inhibitory receptor on the surface of NK cells and T cells, and its engagement with its ligand, E-cadherin, leads to the downregulation of cell-mediated cytotoxicity and cytokine production. KLRG1 has also been shown to be involved in regulating the differentiation and function of memory T cells. In addition to its role in the immune response, KLRG1 has been implicated in other physiological processes, such as wound healing and tissue repair.