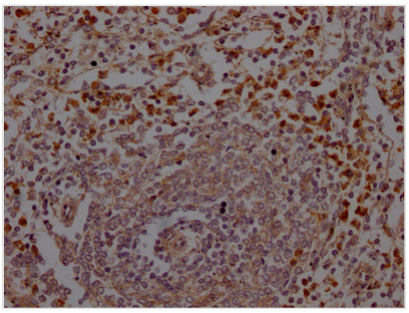
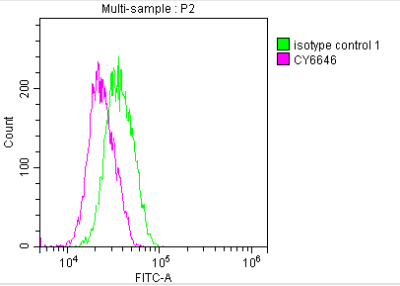
ELANE Recombinant Monoclonal Antibody

Product Code	CSB-RA200985A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P08246
Immunogen	A synthesized peptide derived from human Neutrophil Elastase
Species Reactivity	Human
Tested Applications	ELISA, IHC, FC; Recommended dilution: IHC:1:50-1:200, FC:1:20-1:200
Relevance	Modifies the functions of natural killer cells, monocytes and granulocytes. Inhibits C5a-dependent neutrophil enzyme release and chemotaxis.
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	Cancer; Immunology; Microbiology; Signal transduction
Gene Names	ELANE
Clone No.	2H12

Image



IHC image of CSB-RA200985A0HU diluted at 1:100 and staining in paraffin-embedded human spleen tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Overlay histogram showing Jurkat cells stained with CSB-RA200985A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followedby the antibody (1µg/1*106cells) for 1 h at 4°C.The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min at 4°C. Control antibody (green line) was Rabbit IgG (1µg/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The ELANE recombinant monoclonal antibody is generated through recombinant DNA technology and can be used for the detection of human ELANE protein in ELISA, IHC, and FC assays. The gene encoding the ELANE monoclonal antibody is produced after sequencing the cDNA of the ELANE antibody-generating hybridomas, which are produced by fusing myeloma cells and B cells from an immunized animal with a synthesized peptide derived from human ELANE. The synthesized gene is then cloned into a vector and transfected into cells for cultivation. The resulting ELANE recombinant monoclonal antibody is purified through affinity chromatography from the cell culture supernatant.

The ELANE protein is a protease enzyme primarily expressed in neutrophilic granulocytes. It plays an important role in the immune system by helping to clear pathogens and damaged tissues. ELANE is also involved in the processing and activation of other immune cell-derived molecules, such as cathelicidin and defensins, which can further contribute to the clearance of pathogens and tissue damage. Excessive or uncontrolled ELANE activity can also lead to tissue damage and contribute to the development of various inflammatory and autoimmune diseases, such as acute respiratory distress syndrome (ARDS) and vasculitis.