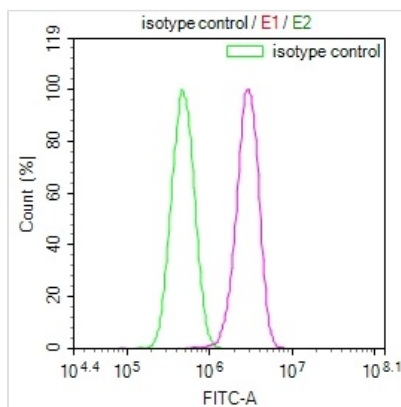




# ENTPD1 Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA568544A0HU
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P49961
<b>Immunogen</b>	A synthesized peptide derived from human ENTPD1
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, FC; Recommended dilution: FC:1:50-1:200
<b>Relevance</b>	In the nervous system, could hydrolyze ATP and other nucleotides to regulate purinergic neurotransmission. Could also be implicated in the prevention of platelet aggregation by hydrolyzing platelet-activating ADP to AMP. Hydrolyzes ATP and ADP equally well. {ECO:0000269 PubMed:8955160}.
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Immunology
<b>Gene Names</b>	ENTPD1
<b>Clone No.</b>	12D12

## Image



Overlay Peak curve showing PC3 cells stained with CSB-RA568544A0HU (red line) at 1:100. The cells were fixed in 4% formaldehyde (15min) and permeated by 0.2% TritonX-100 for 10min. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1\*10<sup>6</sup>cells) 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\*10<sup>6</sup>cells) used under the same conditions. Acquisition of >10,000 events was performed.

## Description

To create the ENTPD1 recombinant monoclonal antibody, a multistep process is followed. The ENTPD1 monoclonal antibody is first harvested, and its gene



sequence is determined. A vector carrying the ENTPD1 monoclonal antibody gene is then constructed and transfected into a host cell line for culture. During ENTPD1 monoclonal antibody synthesis, a synthesized peptide from human ENTPD1 is used as an immunogen. The ENTPD1 recombinant monoclonal antibody is then purified via affinity chromatography, and its specificity is examined using ELISA and FC applications. It only recognizes human ENTPD1 protein.

ENTPD1, also known as CD39, is a protein that plays a key role in purinergic signaling, which is a process that regulates a wide range of cellular functions, including neurotransmission, immune response, and inflammation. Specifically, CD39 is an ectonucleoside triphosphate diphosphohydrolase that catalyzes the hydrolysis of extracellular ATP and ADP to AMP, which can then be further hydrolyzed to adenosine by other enzymes. This conversion of ATP and ADP to adenosine is important for regulating the balance between pro-inflammatory and anti-inflammatory responses in the immune system. CD39 is expressed on the surface of various cell types, including immune cells such as T cells and B cells, and is involved in a range of physiological processes, including regulation of blood clotting, insulin secretion, and vascular function.