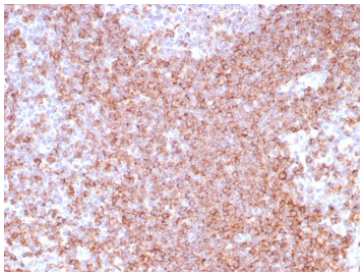
CD39 Antibody Rabbit Monoclonal [clone CD39/8538R] (V4118)

Catalog No.	Formulation	Size
V4118-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4118-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4118SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

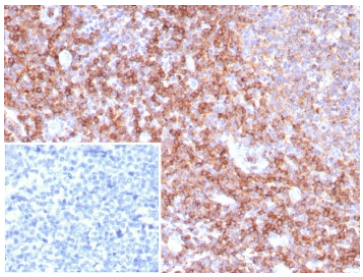
Recombinant RABBIT MONOCLONAL

Bulk quote request

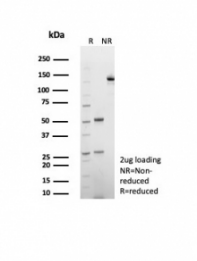
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CD39/8538R
Purity	Protein A/G affinity
UniProt	P49961
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This CD39 antibody is available for research use only.



IHC analysis of CD39 Antibody in FFPE human tonsil tissue. The rabbit monoclonal antibody (clone CD39/8538R) demonstrates membranous HRP-DAB brown staining in lymphocytes within germinal centers and interfollicular regions, consistent with ENTPD1 / CD39 expression. Heat-induced epitope retrieval was performed in 10mM Tris with 1mM EDTA, pH 9.0, at 95oC for 20 minutes followed by cooling before testing.



IHC staining of FFPE human tonsil tissue with CD39 antibody (clone CD39/8538R). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free CD39 antibody (clone CD39/8538R) as confirmation of integrity and purity.

Description

CD39 Antibody recognizes CD39, also known as Ectonucleoside triphosphate diphosphohydrolase 1, a plasma membrane ectoenzyme encoded by the ENTPD1 gene that regulates extracellular nucleotide metabolism and purinergic signaling. CD39 is expressed on endothelial cells, regulatory T cells, B cells, monocytes, macrophages, and selected epithelial cell populations, where it plays a key role in modulating inflammatory and immune responses. CD39 Antibody is suitable for detecting CD39 expression in research applications involving immune regulation, vascular biology, and tumor microenvironment studies.

CD39 antibody, also referred to as ENTPD1 antibody and NTPDase1 antibody in the literature, targets an ectoenzyme that hydrolyzes extracellular ATP and ADP into AMP. By reducing pro-inflammatory ATP levels and contributing to adenosine generation through cooperation with CD73, CD39 limits excessive immune activation and supports immune tolerance. This pathway is particularly relevant in regulatory T cell function and in the immunosuppressive microenvironment of certain cancers.

The ENTPD1 gene is located on chromosome 10q24.1 and encodes a glycosylated transmembrane protein containing two membrane-spanning regions and a large extracellular catalytic domain with conserved apyrase motifs required for nucleotide hydrolysis. CD39 localizes predominantly to the plasma membrane and is highly expressed in vascular endothelium, lymphoid tissues, and placenta. Its distribution reflects its physiologic role in maintaining vascular homeostasis and controlling extracellular nucleotide concentrations.

Altered CD39 expression has been implicated in cancer immune evasion, chronic inflammatory disorders, thrombosis, and cardiovascular disease. In histologic sections, CD39 typically demonstrates membranous staining in endothelial and immune cell populations. Clone CD39/8538R is a rabbit monoclonal antibody developed to recognize CD39 in experimental systems.

Application Notes

Optimal dilution of the CD39 antibody should be determined by the researcher.

Immunogen

Recombinant full-length human CD39 protein was used as the immunogen for the CD39 antibody.

Storage

Aliquot the CD39 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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