Recombinant CD39 / ENTPD1 (Marker of Tumor-specific T cells) Antibody

Mouse Monoclonal Antibody [Clone r22A9]

Catalog No	Format	Size
953-MSM7-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
953-MSM7-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
953-MSM7-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

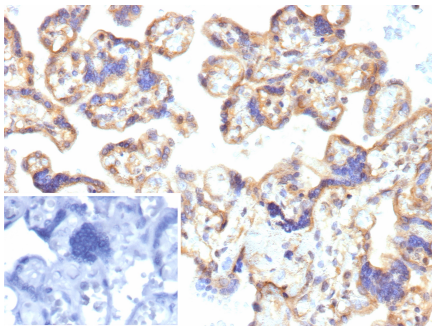
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

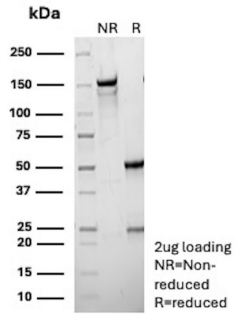
Clone	r22A9
Gene Name	ENTPD1
Immunogen	Prokaryotic recombinant protein corresponding to a portion of the external domain of the CD39 molecule
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2a / Kappa
Mol. Weight of Antigen	70-100 kDa
Cellular Localization	Caveola, Membrane
Species Reactivity	Human
Positive Control	Human tonsil, placenta, kidney or lymph node.

**Optimal dilution for a specific application should be determined.*

Product Images for Recombinant CD39 / ENTPD1 (Marker of Tumor-specific T cells) Antibody



Formalin-fixed, paraffin-embedded human placenta stained with CD39 Recombinant Mouse Monoclonal Antibody (r22A9). Inset: PBS instead of primary antibody; secondary only negative control.



SDS-PAGE Analysis of Purified Recombinant CD39 Mouse Monoclonal Antibody (r22A9). Confirmation of Purity and Integrity of Antibody.

Specificity & Comments

CD39 is a transmembrane glycoprotein and an extracellular nucleotide-hydrolyzing enzyme that plays a key role in regulating extracellular ATP and ADP levels. Also known as E-type apyrase, CD39 hydrolyzes ATP and ADP to AMP, which is further converted to adenosine. By degrading ADP, CD39 inhibits platelet aggregation, contributing to its anti-thrombotic function and potential use in preventing coronary artery occlusion and thrombotic stroke. Intracellularly, CD39 undergoes glycosylation at six N-glycosylation sites before translocating to the membrane to become an active enzyme. Alternative splicing gives rise to three isoforms: vascular, placenta I, and placenta II, with variations at the N-terminus and C-terminus. CD39 is expressed in vascular tissues, including the placenta, lung, skeletal muscle, and kidney, as well as on endothelial cells, smooth muscle cells, cardiac cells, and platelets. In the immune system, CD39 is present on activated B cells, a subset of activated T cells, activated NK cells, macrophages, dendritic cells, and Langerhans cells. It is not expressed on resting lymphocytes but is found in lymphoid tissues, particularly in the mantle zone and paracortical lymphocytes. CD39-expressing cells may provide protection to lymphocytes from the toxic effects of ATP released from damaged cells. Originally identified on Epstein-Barr virus-transformed B cells, CD39 is now recognized as a key immunoregulatory enzyme involved in inflammation, immune suppression, and thrombotic balance.

Supplied As

200ug/ml of Ab produced in CHO cell mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C.Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Immuno Oncology, Immunology, Infectious Disease

Limitations and Warranty