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ENTPD2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50877

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9Y5L3
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53665
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ENTPD2/CD39L1
Epitope Specificity	401-495/495
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Multi-pass membrane protein
SIMILARITY	Belongs to the GDA1/CD39 NTPase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	CD39, also known as ectonucleoside triphosphate diphosphohydrolase 1 (ENP1), is an integral membrane glycoprotein that acts as an extracellular nucleotide-hydrolyzing enzyme. CD39 inhibits ADP-induced platelet aggregation by hydrolyzing ADP to AMP and ultimately generating adenosine. Intracellular CD39 undergoes glycosylation at 6 N-glycosylation sites and translocates to the membrane in order to be an active enzyme. CD39L1 is a 495 amino acid multi-pass membrane protein that requires calcium and magnesium cofactors to hydrolyze ATP and other nucleotides in the regulation of purigenic neurotransmission. CD39L1 is expressed in kidney, colon, heart, testis, pancreas, brain, prostate, skeletal muscle, small intestine and ovaries. There are two isoforms of CD39L1 that are produced as a result of alternative splicing events.

Additional Information

Gene ID	954
Other Names	Ectonucleoside triphosphate diphosphohydrolase 2, NTPDase 2, 361-, CD39 antigen-like 1, Ecto-ATP diphosphohydrolase 2, Ecto-ATPDase 2, Ecto-ATPase 2, ENTPD2, CD39L1
Target/Specificity	Brain, placenta, skeletal muscle, kidney, pancreas, heart, ovary, testis, colon, small intestine, prostate and pancreas. No expression in adult thymus, spleen, lung, liver and peripheral blood leukocytes.

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ENTPD2
Synonyms	CD39L1
Function	In the nervous system, could hydrolyze ATP and other nucleotides to regulate purinergic neurotransmission. Hydrolyzes ADP only to a marginal extent. The order of activity with different substrates is ATP > GTP > CTP = ITP > UTP >> ADP = UDP.
Cellular Location	[Isoform Long]: Cell membrane; Multi-pass membrane protein [Isoform gamma]: Endoplasmic reticulum membrane; Multi-pass membrane protein
Tissue Location	Brain, placenta, skeletal muscle, kidney, pancreas, heart, ovary, testis, colon, small intestine, prostate and pancreas. No expression in adult thymus, spleen, lung, liver and peripheral blood leukocytes

Background

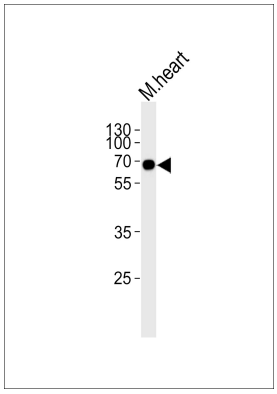
CD39, also known as ectonucleoside triphosphate diphosphohydrolase 1 (ENP1), is an integral membrane glycoprotein that acts as an extracellular nucleotide-hydrolyzing enzyme. CD39 inhibits ADP-induced platelet aggregation by hydrolyzing ADP to AMP and ultimately generating adenosine. Intracellular CD39 undergoes glycosylation at 6 N-glycosylation sites and translocates to the membrane in order to be an active enzyme. CD39L1 is a 495 amino acid multi-pass membrane protein that requires calcium and magnesium cofactors to hydrolyze ATP and other nucleotides in the regulation of purigenic neurotransmission. CD39L1 is expressed in kidney, colon, heart, testis, pancreas, brain, prostate, skeletal muscle, small intestine and ovaries. There are two isoforms of CD39L1 that are produced as a result of alternative splicing events.

References

Chadwick B.P.,et al.Mamm. Genome 8:668-672(1997).
Mateo J.,et al.Br. J. Pharmacol. 128:396-402(1999).
Mukasa T.,et al.Biochemistry 44:11160-11170(2005).
Humphray S.J.,et al.Nature 429:369-374(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

Images

Western blot analysis of lysate from mouse heart tissue lysate, using ENTPD2 Antibody (N-term)(AP50877). AP50877 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysate at 20ug.



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