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ENTPD2 Rabbit pAb

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Catalog # AP50877

Product Information

Application	WB
Primary Accession	Q9Y5L3
Reactivity	Rat
Predicted	Human, Mouse, Chicken, Sheep
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
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, E-NTPDase 2, NTPDase 2, 3.6.1.5, CD39 antigen-like 1, Ecto-ATP diphosphohydrolase 2, Ecto-ATPDase 2, Ecto-ATPase 2, ENTPD2 (HGNC:3364)
Dilution	WB=1:500-2000
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 (HGNC:3364)
Function	Catalyzes the hydrolysis of nucleoside triphosphates (NTPs) and diphosphates (NDPs), with a marked preference for triphosphonucleosides over diphosphonucleosides (PubMed:10510450, PubMed:12888562, PubMed:16101300, PubMed:18404504). The enzyme sequentially removes phosphate groups in two successive steps, converting NTPs to nucleoside monophosphates (NMPs) via NDP intermediates (PubMed:10510450, PubMed:12888562, PubMed:16101300, PubMed:18404504). This activity contributes to the regulation of extracellular nucleotides levels (PubMed:10510450, PubMed:12888562, PubMed:16101300, PubMed:18404504). ATP hydrolysis is characterized by fast ADP accumulation and delayed AMP formation, reflecting limited ADP hydrolase activity (By similarity). Hydrolyzes ADP and UDP only to a marginal extent, and does not hydrolyze AMP (PubMed:10510450, PubMed:12888562, PubMed:16101300, PubMed:18404504). All nucleoside 5'- diphosphates are hydrolyzed at rates lower than those of their corresponding triphosphates (By similarity).
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 (PubMed:9271669). No expression in adult thymus, spleen, lung, liver and peripheral blood leukocytes (PubMed:9271669)

Background

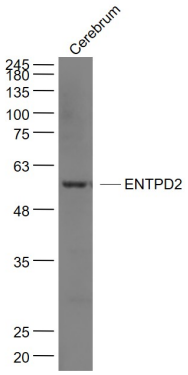
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References

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

Sample:
Cerebrum (Rat) Lysate at 40 ug
Primary: Anti- ENTPD2 (AP50877) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 54 kD
Observed band size: 54 kD



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