Revision 1

Store at -20C

#9684

NT5E/CD73 Antibody

Cell Signaling TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M R	Endogenous	70	Rabbit	#P21589	4907

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

NT5E/CD73 Antibody recognizes endogenous levels of total NT5E protein.

Species predicted to react based on 100% sequence homology:

Monkey

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp522 of human NT5E protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Ecto-5'-nucleotidase (NT5E, also called CD73) is a 70 kDa glycosyl phosphatidylinositol-anchored, membrane-bound glycoprotein that catalyzes the hydrolysis of extracellular nucleoside monophosphates into bioactive nucleosides (1). NT5E catalyzes the terminal step of extracellular adenosine formation from adenosine monophosphate, which drives the regulation of extracellular adenosine levels and the downstream activation of the four G protein-coupled adenosine receptors (2). Binding of hypoxia-inducible factor (HIF-1) to the NT5E gene promoter leads to upregulation of NT5E during hypoxia (3). The biological roles of NT5E include lymphocyte adhesion (4,5), fibrosis (6), and the regulation of nociception (7,8).

Background References

1. Le Hir, M. and Kaissling, B. (1993) *Am J Physiol* 264, F377-87.
2. Schulte, G. and Fredholm, B.B. (2003) *Cell Signal* 15, 813-27.
3. Synnestvedt, K. et al. (2002) *J Clin Invest* 110, 993-1002.
4. Arvilommi, A.M. et al. (1997) *Eur J Immunol* 27, 248-54.
5. Airas, L. and Jalkanen, S. (1996) *Blood* 88, 1755-64.
6. Peng, Z. et al. (2008) *Nucleosides Nucleotides Nucleic Acids* 27, 821-4.
7. Sowa, N.A. et al. (2010) *J Neurosci* 30, 2235-44.
8. Zylka, M.J. (2011) *Trends Mol Med* 17, 188-96.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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