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NT5E Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1913a

Product Information

Application	WB, IHC, FC, E
Primary Accession	P21589
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	4G6E3
Isotype	IgG1
Calculated MW	63368
Description	The protein encoded by this gene is a plasma membrane protein that catalyzes the conversion of extracellular nucleotides to membrane-permeable nucleosides. The encoded protein is used as a determinant of lymphocyte differentiation. Defects in this gene can lead to the calcification of joints and arteries. Two transcript variants encoding different isoforms have been found for this gene.
Immunogen	Purified recombinant fragment of human NT5E (AA: 30-250) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide.

Additional Information

Gene ID	4907
Other Names	5'-nucleotidase, 5'-NT, 3.1.3.5, Ecto-5'-nucleotidase, CD73, NT5E, NT5, NTE
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NT5E Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NT5E
Synonyms	NT5, NTE

Function	Catalyzes the hydrolysis of nucleotide monophosphates, releasing inorganic phosphate and the corresponding nucleoside, with AMP being the preferred substrate (PubMed:21933152, PubMed:22997138, PubMed:23142347, PubMed:24887587, PubMed:34403084). Shows a preference for ribonucleotide monophosphates over their equivalent deoxyribose forms (PubMed:34403084). Other substrates include IMP, UMP, GMP, CMP, dAMP, dCMP, dTMP, NAD and NMN (PubMed:21933152, PubMed:22997138, PubMed:23142347, PubMed:24887587, PubMed:34403084).
Cellular Location	Cell membrane; Lipid-anchor, GPI-anchor

Background

The bone morphogenetic protein (BMP) receptors are a family of transmembrane serine/threonine kinases that include the type I receptors BMPR1A and BMPR1B and the type II receptor BMPR2. These receptors are also closely related to the activin receptors, ACVR1 and ACVR2. The ligands of these receptors are members of the TGF-beta superfamily. TGF-betas and activins transduce their signals through the formation of heteromeric complexes with 2 different types of serine (threonine) kinase receptors: type I receptors of about 50-55 kD and type II receptors of about 70-80 kD. Type II receptors bind ligands in the absence of type I receptors, but they require their respective type I receptors for signaling, whereas type I receptors require their respective type II receptors for ligand binding. ; ;

References

1. Appl Immunohistochem Mol Morphol. 2012 Mar;20(2):103-7. 2. J Surg Oncol. 2012 Aug 1;106(2):130-7.

Images

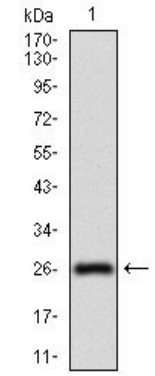


Figure 1: Western blot analysis using NT5E mAb against human NT5E (AA: 30-250) recombinant protein. (Expected MW is 26.6 kDa)

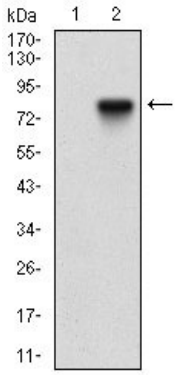
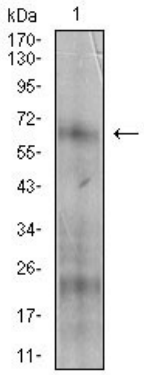


Figure 2: Western blot analysis using NT5E mAb against HEK293 (1) and NT5E (AA: 30-250)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 3: Western blot analysis using NT5E mouse mAb against A431 cell lysate.



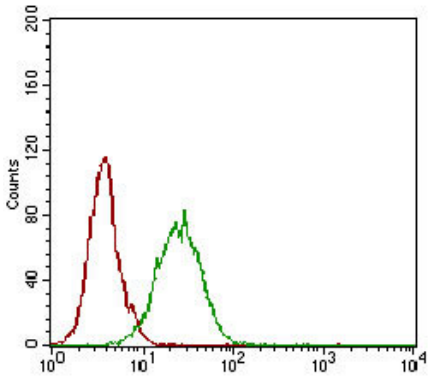


Figure 4: Flow cytometric analysis of A431 cells using NT5E mouse mAb (green) and negative control (red).

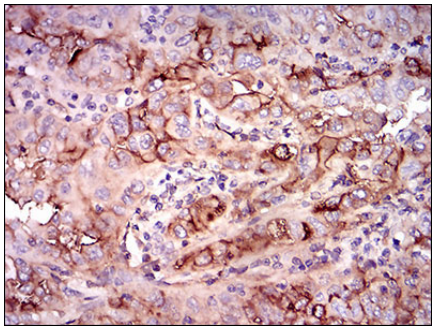


Figure 5: Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues using NT5E mouse mAb with DAB staining.

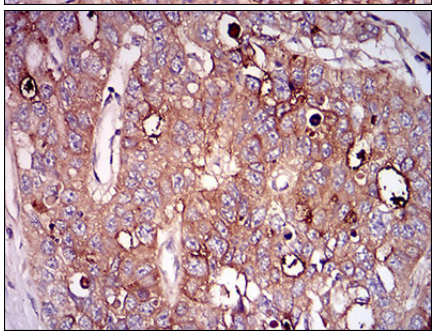


Figure 6: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using NT5E mouse mAb with DAB staining.