

N acetylglucosamine kinase Rabbit pAb

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Catalog # AP58795

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9UJ70
Reactivity	Mouse
Predicted	Rat, Human, Rabbit, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37376
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human N acetylglucosamine kinase
Epitope Specificity	201-300/344
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Converts endogenous N-acetylglucosamine (GlcNAc), a major component of complex carbohydrates, from lysosomal degradation or nutritional sources into GlcNAc 6-phosphate. Also has ManNAc kinase activity.

Additional Information

Gene ID	55577
Other Names	N-acetyl-D-glucosamine kinase, N-acetylglucosamine kinase, 2.7.1.59, GlcNAc kinase, Muramyl dipeptide kinase, 2.7.1.-, N-acetyl-D-mannosamine kinase, 2.7.1.60, NAGK {ECO:0000303 PubMed:36002575, ECO:0000312 HGNC:HGNC:17174}
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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

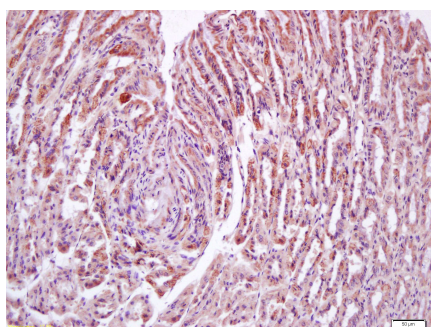
Name	NAGK {ECO:0000303 PubMed:36002575, ECO:0000312 HGNC:HGNC:17174}
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Function	Converts endogenous N-acetylglucosamine (GlcNAc), a major component of complex carbohydrates, from lysosomal degradation or nutritional sources into GlcNAc 6-phosphate (PubMed: 22692205). Involved in the N-glycolylneuraminic acid (Neu5Gc) degradation pathway: although human is not able to catalyze formation of Neu5Gc due to the inactive CMAHP enzyme, Neu5Gc is present in food and must be degraded (PubMed: 22692205). Also has N-acetylmannosamine (ManNAc) kinase activity (By similarity). Also involved in innate immunity by promoting detection of bacterial peptidoglycan by NOD2: acts by catalyzing phosphorylation of muramyl dipeptide (MDP), a fragment of bacterial peptidoglycan, to generate 6-O-phospho-muramyl dipeptide, which acts as a direct ligand for NOD2 (PubMed: 36002575).
Tissue Location	Ubiquitous..

Background

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Images



Tissue/cell: mouse stomach tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-N acetylglucosamine kinase Polyclonal Antibody, Unconjugated(AP58795) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.