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N acetylglucosamine kinase Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58795

Specification

N acetylglucosamine kinase Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, E**
Primary Accession	Q9UJ70
Reactivity	**Rat, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**37 KDa**
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.**
SIMILARITY	**Belongs to the eukaryotic-type N-acetylglucosamine kinase family.**
SUBUNIT	**Homodimer**
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.

N acetylglucosamine kinase Polyclonal Antibody - Additional Information

Gene ID 55577

Other Names
N-acetyl-D-glucosamine kinase, N-acetylglucosamine kinase, 2.7.1.59, GlcNAc kinase, NAGK

Target/Specificity
Ubiquitous.

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Storage
Store at -20 ℃ 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 ℃.

N acetylglucosamine kinase Polyclonal Antibody - Protein Information

Name NAGK {ECO:0000303|PubMed:36002575, ECO:0000312|HGNC:HGNC:17174}

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).

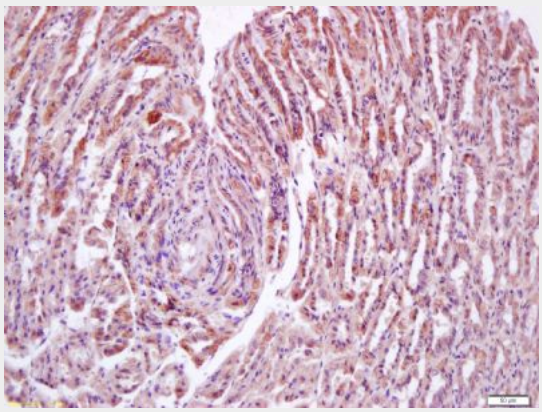
Tissue Location
Ubiquitous..

N acetylglucosamine kinase Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

N acetylglucosamine kinase Polyclonal Antibody - 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℃ for 20 min;
Incubation: Anti-N acetylglucosamine kinase Polyclonal Antibody, Unconjugated(bs-7916R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining