

Product Name: KD-Validated NAGK Mouse Monoclonal Antibody**Catalog #: KVA00423**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,M
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:400-1:2,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 37.4kDa

Antigen Information

Gene Name	NAGK
Alternative Names	NAGK; N-Acetylglucosamine Kinase; GNK; N-Acetyl-D-Glucosamine Kinase; N-Acetyl-D-Mannosamine Kinase; Muramyl Dipeptide Kinase; GlcNAc Kinase; EC 2.7.1.59; Epididymis Secretory Sperm Binding Protein; EC 2.7.1.60; EC 2.7.1.-; HSA242910
Gene ID	55577.0
SwissProt ID	Q9UJ70
Immunogen	Recombinant protein of human NAGK

Background

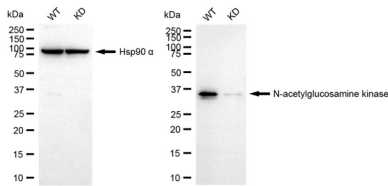
This gene encodes a member of the N-acetylhexosamine kinase family. The encoded protein catalyzes the conversion of N-acetyl-D-glucosamine to N-acetyl-D-glucosamine 6-phosphate, and is the major mammalian enzyme which recovers amino

sugars. [provided by RefSeq, Nov 2011]

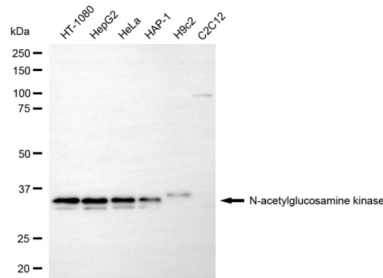
Research Area

Cell Biology,Signal Transduction,Metabolism

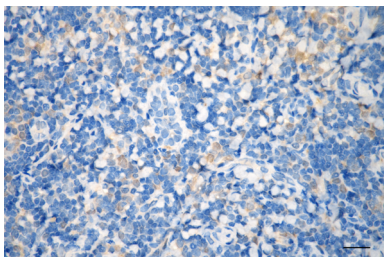
Image Data



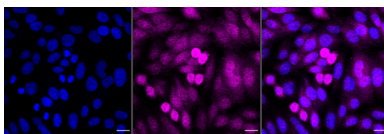
Western blotting analysis using N-acetylglucosamine kinase antibody (KVA00423). N-acetylglucosamine kinase expression in wild-type (WT) and N-acetylglucosamine kinase (NAGK) knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with N-acetylglucosamine kinase antibody (KVA00423, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



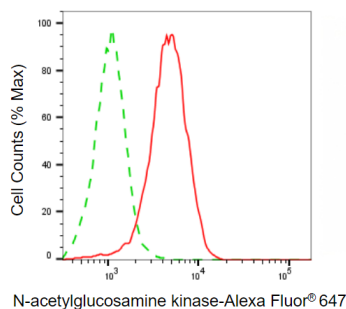
Western blotting analysis using N-acetylglucosamine kinase antibody (KVA00423). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with N-acetylglucosamine kinase antibody (KVA00423, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human tonsillitis using n-acetylglucosamine kinase antibody (KVA00423, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HepG2 cells with N-acetylglucosamine kinase antibody (KVA00423, 1:1,000). Nuclei were stained blue with DAPI; N-acetylglucosamine kinase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Low. Scale bar, 20 µm.



Flow cytometric analysis of N-acetylglucosamine kinase expression in HepG2 cells using N-acetylglucosamine kinase antibody (KVA00423, 1:2,000). Green, isotype control; red, N-acetylglucosamine kinase.