

Anti-NAG-1 (C-terminal specific) (RABBIT) Antibody Biotin Conjugated - 600-406-B07

Code: 600-406-B07

Size: 100 µg

Product Description: Anti-NAG-1 (C-terminal specific) (RABBIT) Antibody Biotin Conjugated - 600-406-B07

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Lyophilized

Label	Biotin
Host	Rabbit
Gene Name	GDF15
Species Reactivity	human, mouse
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	NAG-1, GDF15, MIC-1, nonsteroidal anti-inflammatory drug-activated gene, NSAID-activated gene 1 protein, growth differentiation factor 15, macrophage inhibitory compound 1, prostate-derived factor
Application Note	Nag-1 Antibody Biotin Conjugated antibody is suitable for ELISA and western blotting of human and mouse NAG-1 protein. For detection of NAG-1 in human serum, a sandwich ELISA is suggested using this antibody in combination with anti-NAG-1/GDF15 (N-terminal), H variant or D variant specific antibodies. Specific conditions for reactivity should be optimized by the end user. Expect bands in Western blots of approximately 14 and 28 kDa in size corresponding to NAG-1 monomer and dimer, respectively, using the appropriate cell lysate or extract.
Background	Non-steroidal anti-inflammatory drug (NSAID) activated gene (NAG-1) is a member of the transforming growth factor-beta (TGF-beta) superfamily. NAG-1 is also known as Macrophage Inhibitory Cytokine-1 (MIC-1), Growth Differentiation Factor 15 (GDF15), Placental Bone Morphogenetic Protein (PLAB), or Prostate Derived Factor (PDF). NAG-1 is expressed in human placenta, prostate and colon. It possesses antitumorigenic and proapoptotic activities. NAG-1 expression is dramatically increased in inflammation, injury and malignancy. Increase of NAG-1 expression is a feature of many cancers including breast, colon, pancreas and prostate. In a number of studies, NAG-1 expression was increased by a number of NSAIDs. This increase in expression may correlate with the chemopreventive effect NSAIDs seem to have with certain cancers. NAG-1 expression is also induced by PPAR gamma ligands and by several dietary compounds such as conjugated linoleic acids (CLAs), naturally occurring fatty acids in ruminant food products, indoles, epicatechin gallate, and genistein. Induced expression of NAG-1 results in stimulation of apoptosis and inhibition of cell growth. Inhibition of NAG-1 induced expression by small interference RNA (siRNA) results in repression of induced apoptosis. NAG-1 expression is regulated by a number of transcription factors such as ERG-1 and Sp1. EGR-1 may be necessary for NSAID-induced NAG-1 expression. The study of expression of NAG-1 proteins, including variants, is important to define their potential role as serum biomarkers for cancer diagnosis, treatment monitoring, epidemiology study, and nutrition surveys.
Purity And Specificity	Nag-1 Antibody Biotin Conjugated antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with the C-terminus of endogenous NAG-1 protein from human and mouse tissues. A BLAST analysis suggests reactivity with NAG-1 from chimpanzee and macaque based on a 100% homology. Partial reactivity is expected against rat based on an 86% homology with the immunizing sequence. Cross-reactivity with NAG-1 from other sources has not been determined.
ELISA	1:20,000-1:100,000
Immunohistochemistry	1:1,000-1:5,000
WESTERN BLOT	1:2,000-1:10,000
IHC	1:1,000-1:5,000
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	Nag-1 Antibody Biotin Conjugated antibody was prepared by repeated immunizations with a synthetic peptide corresponding to a region near the carboxy terminal end of human NAG-1 protein. A residue of cysteine was added to facilitate coupling to KLH.
General Reference	Baek, S.J., Eling, T.E. (2006) Changes in gene expression contribute to cancer prevention by COX inhibitors.

Prog Lipid Res. 45(1):1-16.

Lindmark, F., Zheng, S.L., Wiklund, F., Bensen, J., Balter, K.A., Chang, B., Hedelin, M., Clark, J., Stattin, P., Meyers, D.A., Adami, H-O., Isaacs, W., Gronberg, H. and Xu, J. (2004) H6D Polymorphism in Macrophage-Inhibitory Cytokine-1 Gene Associated With Prostate Cancer J Natl Cancer Inst. 96(16): 1248-1254.

Related Products

600-403-B08	Anti-NAG-1 (H variant specific) (RABBIT) Antibody Peroxidase Conjugated - 600-403-B08
600-403-B09	Anti-NAG-1 (D variant specific) (RABBIT) Antibody Peroxidase Conjugated - 600-403-B09
600-403-B10	Anti-NAG-1 (N-terminal specific) (RABBIT) Antibody Peroxidase Conjugated - 600-403-B10
B304	NORMAL GOAT SERUM (NGS) - B304

Related Links

UniProtKB	http://www.uniprot.org/uniprot/Q99988
NCBI - Q99988.3	http://www.ncbi.nlm.nih.gov/protein/Q99988.3
UniProt - Q99988	http://www.uniprot.org/uniprot/Q99988
Gene ID - 9518	http://www.ncbi.nlm.nih.gov/gene/9518

Images