

Datasheet for 210-406-B68**GDF15 Antibody Biotin Conjugated****Overview**

Description:	Anti-NAG-1 (RABBIT) Antibody Biotin Conjugated - 210-406-B68
Item No.:	210-406-B68
Size:	100 µg
Applications:	WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details**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 numbers 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.

Synonyms:	rabbit anti-NAG-1 biotin conjugated antibody, NAG1, 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
Host Species:	Rabbit
Conjugate:	Biotin

Clonality: Polyclonal

Format: IgG

Target Details

Gene Name: Gdf15

Reactivity: Human, Mouse

Immunogen Type: Recombinant Protein

Immunogen: This Protein-A purified antibody was prepared by repeated immunizations with an MBP-tagged recombinant protein produced in E.coli corresponding to full-length mouse NAG-1 protein. Cross reactivity to MBP was removed via cross-adsorption chromatography.

Purity/Specificity: This product was Protein-A purified and MBP-cross-adsorbed from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with endogenous NAG-1 protein from mouse and human tissues. A BLAST analysis suggests reactivity with NAG-1 from rat based on 100% homology. Partial reactivity is expected against swine, bovine and dog based on 92% homology. Cross-reactivity with NAG-1 from other sources has not been determined.

Relevant Links:

- [UniProtKB - Q9Z0J7](#)
- [NCBI - NP_035949](#)
- [GeneID - 23886](#)

Application Details

Tested Applications: WB

Application Note: This Protein-A purified, MBP-cross-adsorbed NAG1/GDF15 Biotin conjugated antibody has been tested by western blot of mouse and human NAG-1 protein and is suitable for ELISA. For detection of NAG-1 in mouse serum, a sandwich ELISA is suggested using this antibody in combination with anti-NAG1/GDF15 (N-terminal) 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.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:20,000 - 1:100,000

IHC: 1:1,000-1:5,000

WB: 1:2,000-1:10,000

Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.