

## Anti-Nag-1 GDF15 Antibody Peroxidase Conjugated

Catalog Number: A01583-3

### About GDF15

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.

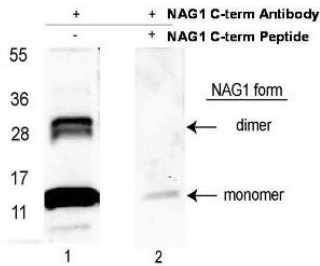
### Overview

Product Name	Anti-Nag-1 GDF15 Antibody Peroxidase Conjugated
Reactive Species	Human, Mouse
Description	Boster Bio Anti-Nag-1 GDF15 Antibody Peroxidase Conjugated (Catalog # A01583-3). Tested in ELISA applications. This antibody reacts with Human, Mouse.
Conjugate	HRP
Application	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, antibody formulated with stabilizing protein (10 mg/mL) - Immunoglobulin and Protease free, 0.01% (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide! *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	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 date is one (1) year from date of opening. (Ship at ambient temperature.)
Host	Rabbit
Uniprot ID	Q99988

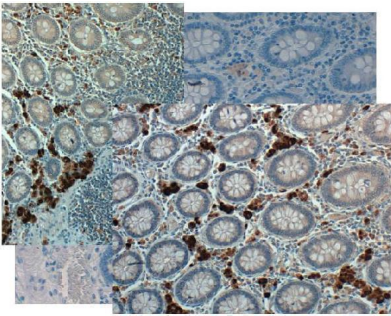
## Technical Details

Immunogen	Anti-NAG-1 (C-terminal specific) 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.
Predicted Reactive Species	Bovine, Mammalian
Isotype	IgG
Form	Lyophilized
Concentration	1.07 mg/ml by UV absorbance at 280 nm
Purification	Anti-NAG-1 (C-terminal specific) 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.
Suggested Dilutions	ELISA: 1:10,000-1:50,000 IHC: 1:500-1:2,500 WB: 1:1,000-1:5,000 Anti-NAG1/GDF15 (C-terminal specific) antibody has been tested by ELISA and is suitable for IHC 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.

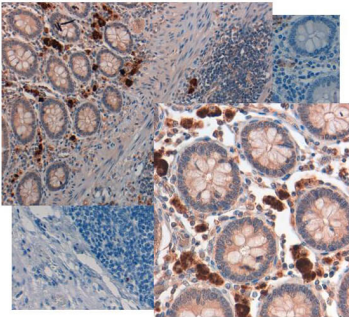
## Anti-Nag-1 GDF15 Antibody Peroxidase Conjugated (A01583-3) Images



Western blot using Boster's affinity purified anti-NAG-1/GDF15 (C-terminal) antibody shows detection NAG-1 purified from CHO cells as a 14 kDa band corresponding to monomer and a 28 kDa band corresponding to dimerized NAG-1. Samples were electrophoresed on a 4-20% gradient gel under reducing conditions. Lane 1 shows NAG-1 detection. Lane 2 shows reactivity is blocked when this antibody is pre-incubated with the immunizing peptide prior to Western blotting.



Immunohistochemistry of Rabbit anti NAG1 antibody (C-terminal specific). Tissue: Human Colon at 20X in colon tissue at pH 6. Negative control of human colon tissue pH6 is shown in background.



Immunohistochemistry of Rabbit anti NAG1 antibody (C-terminal specific). Tissue: Human Colon at 20X in colon tissue at pH 6. Negative control of human colon tissue pH6 is shown in background.

### 1 Publications Citing This Product

1. PubMed ID: 22117761, Wang Y, Li D, Xu N, Tao W, Zhu R, Sun R, Fan W, Zhang P, Dong T, Yu L. Arthritis Res Ther. 2011;13(6):R193. Doi: 10.1186/Ar3522. Epub 2011 Nov 25. Follistatin-Like Protein 1: A Serum Biochemical Marker Reflecting The Severity Of Joint Damage In Pa...

Visit [bosterbio.com/anti-nag-1-antibody-peroxidase-conjugated-a01583-3-boster.html](http://bosterbio.com/anti-nag-1-antibody-peroxidase-conjugated-a01583-3-boster.html) to see all 1 publications.

### Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Nag-1 GDF15 Antibody Peroxidase Conjugated

For Research Use Only. Not for use in diagnostic procedures.