Datasheet for ABIN1043921

anti-GDF15 antibody (N-Term) (Biotin)

1 Image | 1 Publication

Go to Product page

Overview

Quantity:	100 µg
Target:	GDF15
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GDF15 antibody is conjugated to Biotin
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	This affinity purified antibody was prepared by repeated immunizations with a synthetic peptide corresponding to a region near the amino terminal end of human NAG-1 protein. A residue of cysteine was added to facilitate coupling to KLH. Immunogen Type: Peptide
Isotype:	IgG
Specificity:	This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody specifically reacts with a H variant sequence of human NAG-1 protein from human tissues. A BLAST analysis was used to suggest partial reactivity with NAG-1 from chimpanzee and macaque based on a 92% homology. Cross-reactivity with NAG-1 from other sources has not been determined.
Characteristics:	Non-steroidal anti-inflammatory drug (NSAID) activated gene (NAG-1) is a member of the

Product Details

	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.
Purification:	affinity purified

Target Details

Target:	GDF15
Alternative Name:	Nag-1 (GDF15 Products)
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-

Target Details

	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: 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
Gene ID:	9518
UniProt:	Q99988
Pathways:	SARS-CoV-2 Protein Interactome

Application Details

Application Notes:	This affinity purified antibody is suitable for use in ELISA and western blotting assays. This reagent is particularly useful to differentiate polymorphic forms of NAG-1 protein present in human serum samples. This antibody is useful in dual antibody immunometric assays (EIA). Specific conditions for reactivity should be optimized by the end user.
Comment:	Gene Name: GDF15
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Buffer: Restore with deionized water (or equivalent), Reconstitution Volume: 100 µL
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C/-20 °C

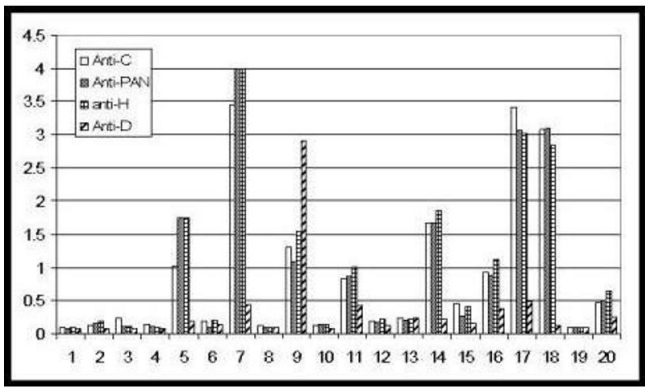
Handling

Storage Comment:	Store secondary antibody 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.
Expiry Date:	12 months

Publications

Product cited in:	Baek, Eling: "Changes in gene expression contribute to cancer prevention by COX inhibitors." in: **Progress in lipid research**, Vol. 45, Issue 1, pp. 1-16, (2006) (PubMed).

Images



ELISA

Image 1. In this sandwich ELISA, NAG-1 was captured from human serum using the following antibodies (see Related Products below): anti-NAG-1/GDF15 (C terminal specific), anti-NAG-1/GDF15 (N terminal specific (PAN)), anti-NAG-1/GDF15 (H-variant) and anti-NAG-1/GDF15 (D-variant) polyclonal antibodies. Micro titer plates were coated with capture antibody at 1 µg/mL. Control plates received PBS only (data not shown). After overnight incubation and blocking, independent experiments using 20 random normal human sera were performed. Neat normal sera were applied and incubated for 1 h at 37 °C. After washing, HRP conjugated anti-NAG-1/GDF15 (C terminal specific) antibody was added for detection at 100 µL per well at 1 µg/mL. Following further incubation for 1 hr at 37°C, the plates were washed and TMBE was added as an HRP substrate for 30 min. The reaction was stopped by 1 M H2SO4 and values were measured at 450nm.