

## **Product datasheet for TA319548**

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## **GDF15 Mouse Monoclonal Antibody [Clone ID: 23G10.F8]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 23G10.F8

Applications: WB

Recommend Dilution: ELISA: 1:200,000, WB: 1:1,000

Reactivity: Human Host: Mouse

Clonality: Monoclonal

**Immunogen:** This Protein A 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.

**Formulation:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Concentration: 1 mg/ml

**Gene Name:** growth differentiation factor 15

Database Link: NP 004855 Entrez Gene 9518 Human

Synonyms: GDF-15; MIC-1; MIC1; NAG-1; PDF; PLAB; PTGFB



Note:

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.

**Protein Families:** 

Druggable Genome, Secreted Protein

## **Product images:**



WB shows detection of recombinant NAG-1 protein (arrow) present in Pichia pastoris whole cell lysates: lane 1 - yeast cell lysate expressing NAG-1 H variant with SUMO expression tag; lane 2 - yeast cell lysate expressing NAG-1 D variant with SUMO expression tag; lane 3 - yeast cell lysate expressing NAG-1 H variant; lane 4 - yeast cell lysate expressing NAG-1 D variant. Primary antibody was used at 1:1000. For detection, HRP conjugated Gt-a-Mouse IgG secondary antibody was used at 1:40000.