

GDF15 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12553a

Specification

GDF15 Antibody (N-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	<u>Q99988</u>
Other Accession	<u>NP_004855.2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	34140
Antigen Region	51-79

GDF15 Antibody (N-term) - Additional Information

Gene ID 9518

Other Names

Growth/differentiation factor 15, GDF-15, Macrophage inhibitory cytokine 1, MIC-1, NSAID-activated gene 1 protein, NAG-1, NSAID-regulated gene 1 protein, NRG-1, Placental TGF-beta, Placental bone morphogenetic protein, Prostate differentiation factor, GDF15, MIC1, PDF, PLAB, PTGFB

Target/Specificity

This GDF15 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 51-79 amino acids from the N-terminal region of human GDF15.

Dilution WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GDF15 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GDF15 Antibody (N-term) - Protein Information



Name GDF15 (<u>HGNC:30142</u>)

Function Regulates food intake, energy expenditure and body weight in response to metabolic and toxin-induced stresses (PubMed:<u>28953886</u>, PubMed:<u>28846097</u>, PubMed:<u>28846098</u>, PubMed:<u>28846099</u>, PubMed:<u>23468844</u>, PubMed:<u>29046435</u>). Binds to its receptor, GFRAL, and activates GFRAL- expressing neurons localized in the area postrema and nucleus tractus solitarius of the brainstem (PubMed:<u>28953886</u>, PubMed:<u>28846097</u>, PubMed:<u>28846098</u>, PubMed:<u>28846099</u>). It then triggers the activation of neurons localized within the parabrachial nucleus and central amygdala, which constitutes part of the 'emergency circuit' that shapes feeding responses to stressful conditions (PubMed:<u>28953886</u>). On hepatocytes, inhibits growth hormone signaling (By similarity).

Cellular Location Secreted

Tissue Location

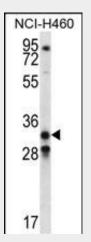
Highly expressed in placenta, with lower levels in prostate and colon and some expression in kidney (PubMed:9348093) Detected in plasma (at protein level) (PubMed:28572090, PubMed:29046435).

GDF15 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

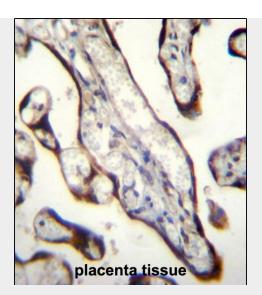
- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

GDF15 Antibody (N-term) - Images

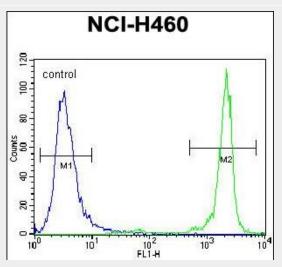


GDF15 Antibody (N-term) (Cat. #AP12553a) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the GDF15 antibody detected the GDF15 protein (arrow).





GDF15 Antibody (N-term) (Cat. #AP12553a)immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GDF15 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



GDF15 Antibody (N-term) (Cat. #AP12553a) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

GDF15 Antibody (N-term) - Background

Bone morphogenetic proteins (e.g., BMP9; MIM 605120) are members of the transforming growth factor-beta (see TGFB1; MIM 190180) superfamily and regulate tissue differentiation and maintenance. They are synthesized as precursor molecules that are processed at a dibasic cleavage site to release C-terminal domains containing a characteristic motif of 7 conserved cysteines in the mature protein.

GDF15 Antibody (N-term) - References

Anand, I.S., et al. Circulation 122(14):1387-1395(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Staff, A.C., et al. Gynecol. Oncol. 118(3):237-243(2010)



Roth, P., et al. Clin. Cancer Res. 16(15):3851-3859(2010) Huh, S.J., et al. Am. J. Pathol. 176(6):2948-2957(2010)