

Goat Anti-GDF15 Antibody

Peptide-affinity purified goat antibody Catalog # AF1474a

Specification

Goat Anti-GDF15 Antibody - Product Information

Application WB, FC, IHC Primary Accession Q99988

Other Accession NP 004855, 9518

Reactivity
Predicted
Host
Clonality
Concentration
Human
Mouse, Rat
Goat
Polyclonal
100ug/200ul

Isotype IgG
Calculated MW 34140

Goat Anti-GDF15 Antibody - 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

Format

0.5~mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-GDF15 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-GDF15 Antibody - Protein Information

Name GDF15 (HGNC:30142)

Function

Regulates food intake, energy expenditure and body weight in response to metabolic and toxin-induced stresses (PubMed:28953886, PubMed:<a href="http://www.uniprot.org/citations/28846097"



target="_blank">28846097, PubMed:28846098, PubMed:28846099, PubMed:23468844, PubMed:29046435). Binds to its receptor, GFRAL, and activates GFRAL- expressing neurons localized in the area postrema and nucleus tractus solitarius of the brainstem (PubMed:28953886, PubMed:28846097, PubMed:28846098, PubMed:28846099). 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:28953886). On hepatocytes, inhibits growth hormone signaling (By similarity).

Cellular Location Secreted

Secreteu

Tissue Location

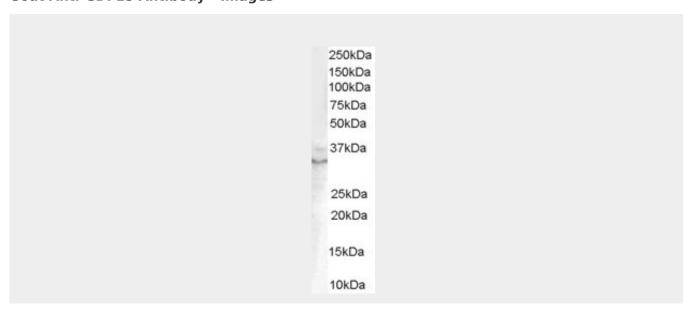
Highly expressed in placenta, with lower levels in prostate and colon and some expression in kidney (PubMed:9348093) Detected in plasma (at protein level) (PubMed:28572090, PubMed:29046435).

Goat Anti-GDF15 Antibody - Protocols

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

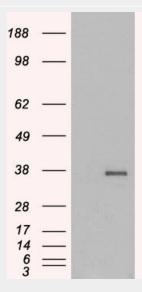
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-GDF15 Antibody - Images

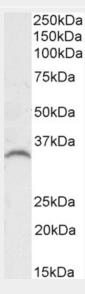




AF1474a (0.1 μ g/ml) staining of Human Prostate lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



HEK293 overexpressing GDF15 (RC201295) and probed with AF1474a (mock transfection in first lane), tested by Origene.

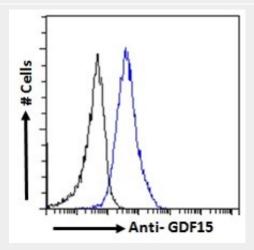


EB06909 (0.1μg/ml) staining of Human Prostate lysate (35μg protein in RIPA buffer). Detected by chemiluminescence.

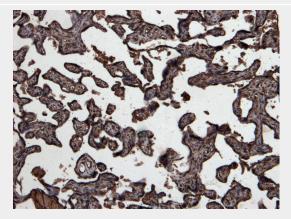




EB06909 (0.1g/ml) staining of LNCaP (A) and (0.3ug/ml) K562 (B) cell lysate (35μg protein in RIPA buffer). Detected by chemiluminescence.

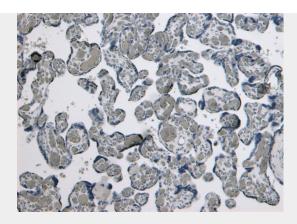


EB06909 Flow cytometric analysis of paraformaldehyde fixed HeLa cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol



EB06909 (7μg/ml) staining of paraffin embedded Human Placenta. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.





EB06909 Negative Control showing staining of paraffin embedded Human Placenta, with no primary antibody.

Goat Anti-GDF15 Antibody - 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.

Goat Anti-GDF15 Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Growth differentiation factor-15 as a prognostic biomarker in ovarian cancer. Staff AC, et al. Gynecol Oncol, 2010 Sep. PMID 20576287.

MCC-555-induced NAG-1 expression is mediated in part by KLF4. Cekanova M, et al. Eur J Pharmacol, 2010 Jul 10. PMID 20385121.

New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.

Analysis of NSAID-activated gene 1 expression in prostate cancer. Kawahara T, et al. Urol Int, 2010. PMID 20215826.