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GDF9 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2069a

Specification

GDF9 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O60383
Other Accession	NP_005251
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**30-59**

GDF9 Antibody (N-term) - Additional Information

Gene ID 2661

Other Names
Growth/differentiation factor 9, GDF-9, GDF9

Target/Specificity
This GDF9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 30-59 amino acids from the N-terminal region of human GDF9.

Dilution
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
GDF9 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GDF9 Antibody (N-term) - Protein Information

Name GDF9

Function Required for ovarian folliculogenesis. Promotes primordial follicle development. Stimulates granulosa cell proliferation. Promotes cell transition from G0/G1 to S and G2/M phases,

through an increase of CCND1 and CCNE1 expression, and RB1 phosphorylation. It regulates STAR expression and cAMP-dependent progesterone release in granulosa and thecal cells. Attenuates the suppressive effects of activin A on STAR expression and progesterone production by increasing the expression of inhibin B. It suppresses FST and FSTL3 production in granulosa-lutein cells.

Cellular Location
Secreted.

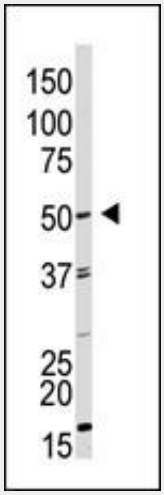
Tissue Location
Expressed in ovarian granulosa cells. Present in oocytes of primary follicles (at protein level)

GDF9 Antibody (N-term) - Protocols

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

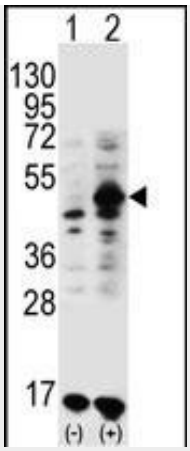
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GDF9 Antibody (N-term) - Images

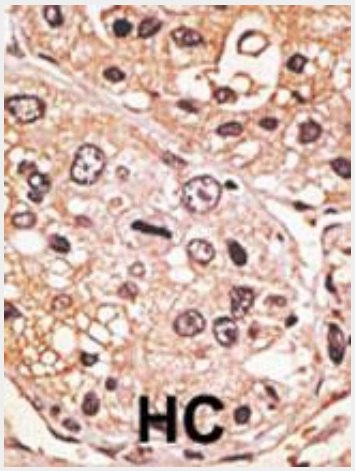


The anti-GDF9 N-term Pab (Cat. #AP2069a) is used in Western blot to detect GDF9 in HL60 cell lysate.

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Western blot analysis of GDF9 (arrow) using rabbit polyclonal GDF9 Antibody (M45) (Cat. #AP2069a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the GDF9 gene.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

GDF9 Antibody (N-term) - Background

GDF9 is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily. This group of proteins is characterized by a polybasic proteolytic processing site which is cleaved to produce a mature protein containing seven conserved cysteine residues. The members of this family are regulators of cell growth and differentiation in both embryonic and adult tissues.Growth factors synthesized by ovarian somatic cells directly affect oocyte growth and function. GDF9 is expressed in oocytes and is thought to be required for ovarian folliculogenesis.

GDF9 Antibody (N-term) - References

Liao, W.X., et al., J. Biol. Chem. 278(6):3713-3719 (2003).
Vitt, U.A., et al., Biol. Reprod. 67(2):473-480 (2002).
Aaltonen, J., et al., J. Clin. Endocrinol. Metab. 84(8):2744-2750 (1999).
Dong, J., et al., Nature 383(6600):531-535 (1996).
McGrath, S.A., et al., Mol. Endocrinol. 9(1):131-136 (1995).

GDF9 Antibody (N-term) - Citations

- Growth differentiation factor 9 concentration in the follicular fluid of infertile women with

endometriosis.