

### **GDF9 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12182a

## **Specification**

### GDF9 Antibody (N-term) - Product Information

**Application** IHC-P, WB,E **Primary Accession** 060383 Other Accession NP 005251.1 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 51444 Antigen Region 80-109

## 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 80-109 amino acids from the N-terminal region of human GDF9.

## **Dilution**

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

E~~Use at an assay dependent concentration.

#### **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**

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**

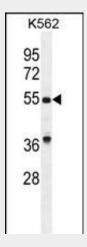
Expressed in ovarian granulosa cells. Present in oocytes of primary follicles (at protein level)

## 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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **GDF9 Antibody (N-term) - Images**



GDF9 Antibody (N-term) (Cat. #AP12182a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the GDF9 antibody detected the GDF9 protein (arrow).





GDF9 Antibody (N-term) (Cat. #AP12182a)immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GDF9 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

## GDF9 Antibody (N-term) - Background

Growth factors synthesized by ovarian somatic cells directly affect oocyte growth and function. Growth differentiation factor-9 (GDF9) is expressed in oocytes and is thought to be required for ovarian folliculogenesis. GDF9 is a member of the transforming growth factor-beta superfamily.

# **GDF9 Antibody (N-term) - References**

Bokobza, S.M., et al. J. Cell. Physiol. 225(2):529-536(2010) Wang, T.T., et al. Fertil. Steril. 94(6):2490-2492(2010) Shi, F.T., et al. J. Clin. Endocrinol. Metab. 95 (10), E172-E180 (2010) : Sproul, K., et al. BJOG 117(6):756-760(2010) Davila, S., et al. Genes Immun. 11(3):232-238(2010)