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GDF9 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12182a

Product Information

Application	WB, IHC-P, E
Primary Accession	O60383
Other Accession	NP_005251.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32227
Calculated MW	51444
Antigen Region	80-109

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	WB~~1:1000 IHC-P~~1:100~500 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.

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)

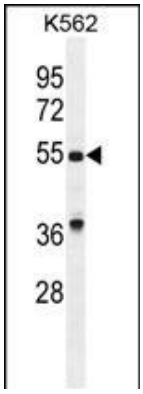
Background

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.

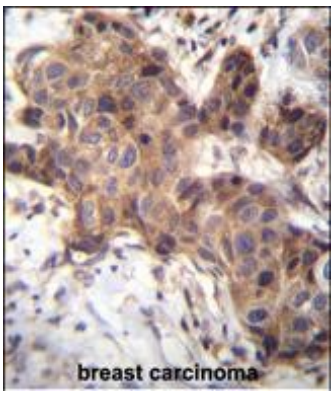
References

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)

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.