

## GDF9 Polyclonal antibody

Catalog Number: 29309-1-AP

## Basic Information

<b>Catalog Number:</b> 29309-1-AP	<b>GenBank Accession Number:</b> BC096228	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2661	<b>Recommended Dilutions:</b> WB 1:500-1:1000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O60383	IHC 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> growth differentiation factor 9	IF/ICC 1:200-1:800
<b>Immunogen Catalog Number:</b> AG29603	<b>Calculated MW:</b> 454 aa, 51 kDa	
	<b>Observed MW:</b> 70 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Species Specificity:**  
human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** A2780 cells, SKOV-3 cells, mouse ovary tissue, rat ovary tissue

**IHC :** mouse ovary tissue,

**IF/ICC :** SKOV-3 cells,

## Background Information

GDF9 (Growth/differentiation factor 9) belongs to the TGF-beta family. GDF9 is required for ovarian folliculogenesis. GDF9 and BMP15 are oocyte-secreted factors with a leading role in the control of ovarian function in female reproduction, modulating both the cell fate of the somatic granulosa cells and the quality and developmental competence of the egg (PMID: 29544636). GDF9 promotes cell transition from G0/G1 to S and G2/M phases, through an increase of CCND1 and CCNE1 expression, and RB1 phosphorylation (PMID: 19366876). It regulates STAR expression and cAMP-dependent progesterone release in granulosa and thecal cells. GDF9 attenuates the suppressive effects of activin A on STAR expression and progesterone production by increasing the expression of inhibin B (PMID: 21829661). It suppresses FST and FSTL3 production in granulosa-lutein cells (PMID: 21632818, PMID: 21829661).

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

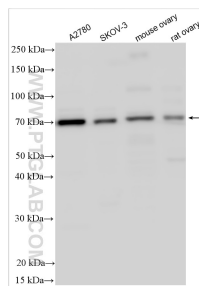
For technical support and original validation data for this product please contact:

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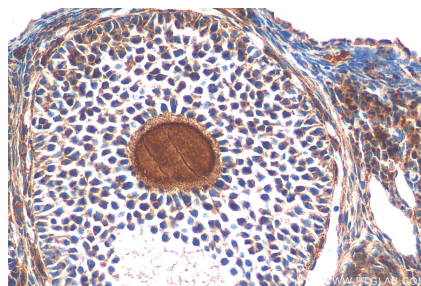
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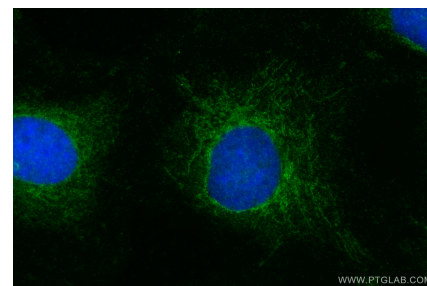
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 29309-1-AP (GDF9 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse ovary tissue slide using 29309-1-AP (GDF9 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed SKOV-3 cells using GDF9 antibody (29309-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).