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PAEP Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14580c

Product Information

Application	WB, IHC-P, E
Primary Accession	P09466
Other Accession	NP_001018059.1, NP_002562.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34558
Calculated MW	20624
Antigen Region	73-101

Additional Information

Gene ID	5047
Other Names	Glycodelin, GD, Placental protein 14, PP14, Pregnancy-associated endometrial alpha-2 globulin, PAEG, PEG, Progestagen-associated endometrial protein, Progesterone-associated endometrial protein, PAEP
Target/Specificity	This PAEP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 73-101 amino acids from the Central region of human PAEP.
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	PAEP Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PAEP
Function	Glycoprotein that regulates critical steps during fertilization and also has immunomonomodulatory effects. Four glycoforms, namely glycodelin-S, -A, -F

	and -C have been identified in reproductive tissues that differ in glycosylation and biological activity. Glycodelin-A has contraceptive and immunosuppressive activities (PubMed:7531163, PubMed:9918684). Glycodelin-C stimulates binding of spermatozoa to the zona pellucida (PubMed:17192260). Glycodelin-F inhibits spermatozoa-zona pellucida binding and significantly suppresses progesterone-induced acrosome reaction of spermatozoa (PubMed:12672671). Glycodelin-S in seminal plasma maintains the uncapacitated state of human spermatozoa (PubMed:15883155).
Cellular Location	Secreted
Tissue Location	This protein is, the main protein synthesized and secreted in the endometrium from mid-luteal phase of the menstrual cycle and during the first semester of pregnancy (PubMed:3667877) Glycodelin-A is expressed in amniotic fluid, endometrium/decidua and maternal serum (at protein level) (PubMed:3194393). Glycodelin-F is expressed in follicular fluid, luteinized granulosa cells and the oviduct (at protein level) (PubMed:12672671). Glycodelin-S is expressed in seminal plasma and seminal vesicles (at protein level) (PubMed:9239694). Glycodelin-C is detected in cumulus cells (at protein level), but cumulus cells do not synthesize Glycodelin-C but take up and convert glycodelin-A and -F vis glycan remodeling (PubMed:17192260).

Background

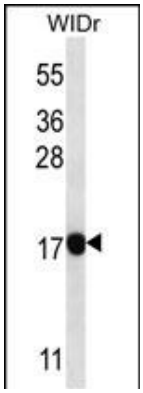
This gene is a member of the kernel lipocalin superfamily whose members share relatively low sequence similarity but have highly conserved exon/intron structure and three-dimensional protein folding. Most lipocalins are clustered on the long arm of chromosome 9. The encoded glycoprotein has been previously referred to as pregnancy-associated endometrial alpha-2-globulin, placental protein 14, and glycodelin, but has been officially named progestagen-associated endometrial protein. Three distinct forms, with identical protein backbones but different glycosylation profiles, are found in amniotic fluid, follicular fluid and seminal plasma of the reproductive system. These glycoproteins have distinct and essential roles in regulating a uterine environment suitable for pregnancy and in the timing and occurrence of the appropriate sequence of events in the fertilization process. A number of alternatively spliced transcript variants have been observed at this locus, but the full-length nature of only two, each encoding the same protein, has been determined. [provided by RefSeq].

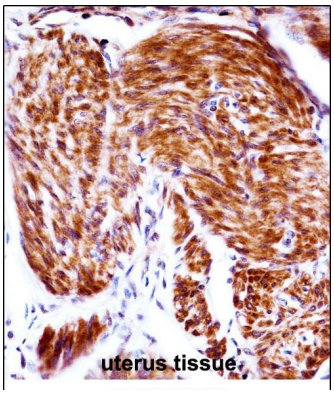
References

Soni, C., et al. Mol. Immunol. 47(15):2458-2466(2010)
Lee, C.L., et al. Fertil. Steril. 94(2):769-771(2010)
Tsviliana, A., et al. Anticancer Res. 30(5):1637-1640(2010)
Scholz, C., et al. Anticancer Res. 30(5):1599-1603(2010)
Amir, M., et al. Reprod. Biol. Endocrinol. 7, 152 (2009) :

Images

PAEP Antibody (Center) (Cat. #AP14580c) western blot analysis in WiDr cell line lysates (35ug/lane).This demonstrates the PAEP antibody detected the PAEP protein (arrow).





PAEP Antibody (Center) (AP14580c)immunohistochemistry analysis in formalin fixed and paraffin embedded human uterus tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PAEP Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- KLF11 epigenetically regulates glycodelin-A, a marker of endometrial biology via histone-modifying chromatin mechanisms.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.