10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PLAC3 Antibody

Catalog # ASC11221

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q9BXP8
Other Accession	NP_064714, 116174738
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	198539
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PLAC3 antibody can be used for detection of PLAC3 by Western blot at 1 g/mL. Antibody can also be used for immunocytochemistry starting at 10 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	60676
Other Names	Pappalysin-2, 3.4.24.-, Pregnancy-associated plasma protein A2, PAPP-A2, Pregnancy-associated plasma protein E1, PAPP-E, PAPPA2, PLAC3
Target/Specificity	PAPPA2;
Reconstitution & Storage	PLAC3 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	PLAC3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PAPPA2
Synonyms	PLAC3
Function	Metalloproteinase which specifically cleaves insulin-like growth factor binding protein (IGFBP)-5 at the '163-Ser-|-Lys-164' bond. Shows limited proteolysis toward IGFBP-3.
Cellular Location	Secreted.
Tissue Location	Expressed abundantly in placenta, and non-pregnant mammary gland with

low expression in the kidney, fetal brain and pancreas.

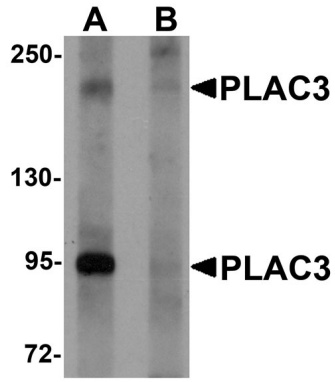
Background

PLAC3 Antibody: PLAC3 (placenta-specific protein 3), also known as PAPP-A2, is a metalloproteinase that cleaves the insulin-like growth factor-binding protein (IGFBP)-5 in a IGF-independent fashion. It has been suggested that the cleavage of IGFBP-5 and to a lesser extent IGFBP-3 produced in the maternal decidua promotes feto-placental growth. Recent studies have shown elevated levels of PLAC3 in hypertensive disorders of pregnancy including preeclampsia and HELLP (hemolysis, elevated liver enzymes, and low platelets) syndrome.

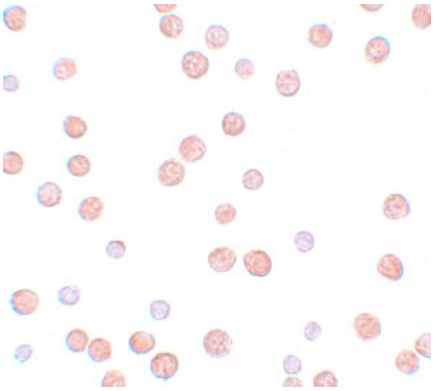
References

Overgaard MT, Boldt HB, Laursen LS, et al. Pregnancy-associated plasma protein-A2 (PAPP-A2), a novel insulin-like growth factor-binding protein-5 proteinase. J. Biol. Chem.2001; 276:1849-53.
Wang J, Qiu Q, Haider M, et al. Expression of pregnancy-associated plasma protein A2 during pregnancy in human and mouse. J. Endocrin.2009; 202:337-45.
Nishizawa H, Pryor-Koishi K, Suzuki M, et al. Increased levels of pregnancy-associated plasma protein-A2 in the serum of pre-eclamptic patients. Mol. Hum. Reprod.2008; 14:595-602.
Buimer M, Keijser R, Jebbink JM, et al. Seven placental transcripts characterize HELLP syndrome. Placenta2008; 29:444-53.

Images

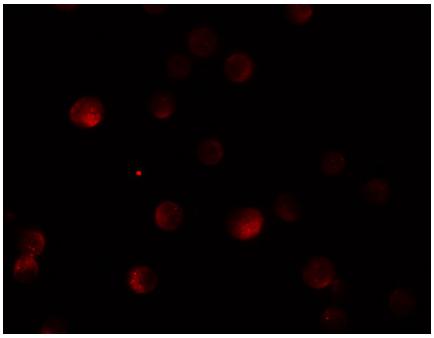


Western blot analysis of PLAC3 in HeLa cell lysate with PLAC3 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of PLAC3 in HeLa cells with PLAC3 antibody at 10 µg/mL.

Immunofluorescence of PLAC3 in HeLa cells with PLAC3 antibody at 20 µg/mL.



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