

PLAC3 Antibody
Catalog # ASC11221**Specification**

PLAC3 Antibody - Product Information

Application	WB, ICC, IF
Primary Accession	Q9BXP8
Other Accession	NP_064714 , 116174738
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	PLAC3 antibody can be used for detection of PLAC3 by Western blot at 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.

PLAC3 Antibody - Additional Information

Gene ID	60676
Target/Specificity	
PAPPA2;	

Reconstitution & Storage

PLAC3 antibody can be stored at 4°C for three months and -20°C, 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.

PLAC3 Antibody - 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

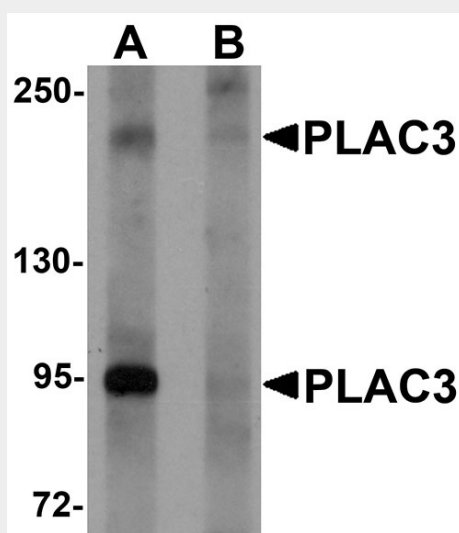
kidney, fetal brain and pancreas.

PLAC3 Antibody - Protocols

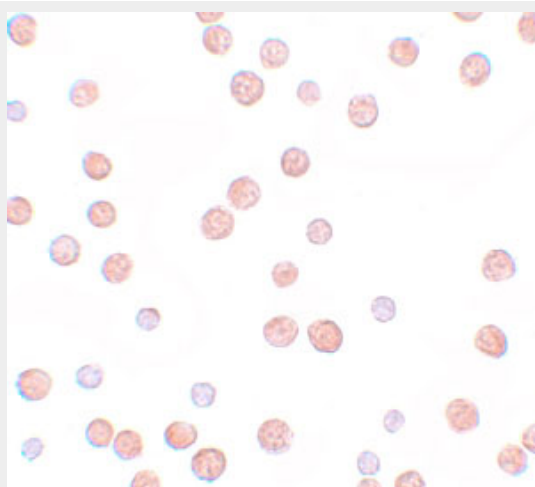
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

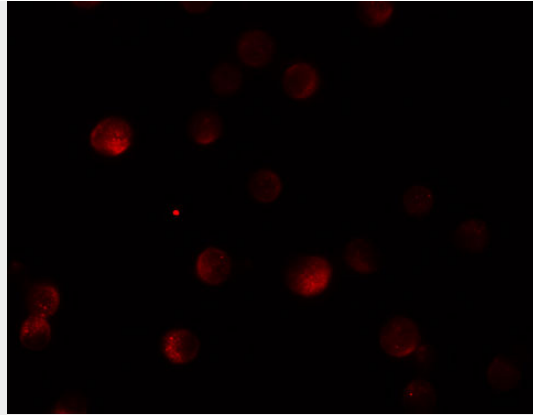
PLAC3 Antibody - Images



Western blot analysis of PLAC3 in HeLa cell lysate with PLAC3 antibody at 1 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of PLAC3 in HeLa cells with PLAC3 antibody at 10 $\mu\text{g/mL}$.



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

PLAC3 Antibody - 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 fetoplacental 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.

PLAC3 Antibody - 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. *Placenta* 2008; 29:444-53.