

PLAC4 Antibody

Catalog # ASC11222

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q8WY50
Other Accession	NP_878252 , 121949815
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	16680
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PLAC4 antibody can be used for detection of PLAC4 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunocytochemistry starting at 10 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Other Names	Placenta-specific protein 4, PLAC4, C21orf115, D21S418E
Target/Specificity	PLAC4;
Reconstitution & Storage	PLAC4 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	PLAC4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLAC4
Synonyms	C21orf115, D21S418E
Tissue Location	Expressed in placental syncytiotrophoblast and choriocarcinoma cells.

Background

PLAC4 Antibody: PLAC4 (placenta-specific protein 4), was initially discovered as a gene whose mRNA was expressed in placental syncytiotrophoblast and choriocarcinoma cells. While the function of PLAC4 is currently unclear, its gene is known to be located on chromosome 21q22.3. Due to the PLAC4 gene location

on chromosome 21 and the release of its mRNA transcripts into maternal bloodstream from the placenta, it has been proposed to be a useful marker noninvasive prenatal chromosome 21 aneuploidy detection, although other reports suggests that PLAC4 mRNA levels are not altered in the maternal circulation of pregnancies with trisomy 21.

References

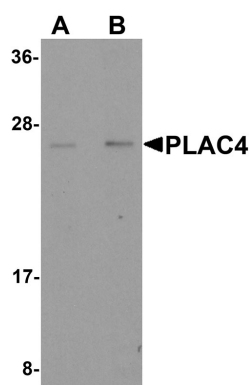
Kido S, Sakuragi N, Bronner MP, et al. D21S418E identifies a cAMP-regulated gene located on chromosome 21q22.3 that is expressed in placental syncytiotrophoblast and choriocarcinoma. *Genomics* 1993; 17:256-9.

Lo YMD, Tsui NBY, Chiu RWK, et al. Plasma placental RNA allelic ratio permits noninvasive prenatal chromosomal aneuploidy detection. *Nat. Med.* 2007; 13:218-223.

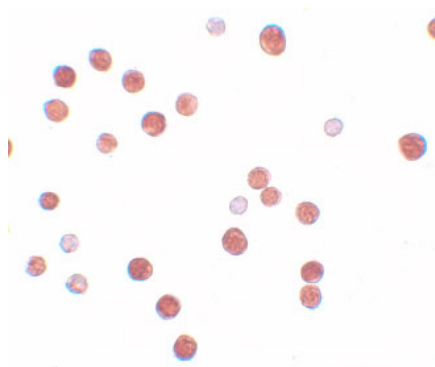
Tsui NB, Akolekar R, Chiu RW, et al. Synergy of total PLAC4 RNA concentration and measurement of the RNA single-nucleotide polymorphism allelic ratio for the noninvasive prenatal detection of trisomy 21. *Clin. Chem.* 2010; 56:73-81.

Banzola I, Rusterholz C, Zannoni L, et al. PLAC4 and beta-HCG mRNA levels are not altered in the maternal circulation of pregnancies with trisomy 21. *Prenat. Diagn.* 2008; 28:1262-7.

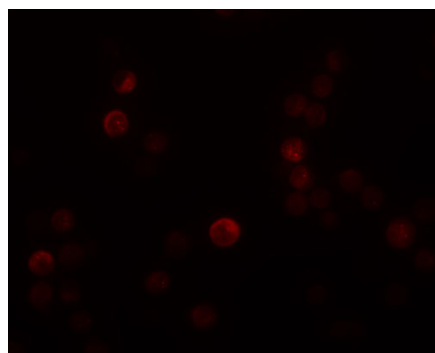
Images



Western blot analysis of PLAC4 in human placenta tissue lysate with PLAC4 antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of PLAC4 in HeLa cells with PLAC4 antibody at 10 µg/mL.



Immunofluorescence of PLAC4 in HeLa cells with PLAC4 antibody at 20 µg/mL.