

PLAC1 Antibody

Catalog # ASC11219

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q9HBJ0
Other Accession	NP_068568 , 11496283
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	23616
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PLAC1 antibody can be used for detection of PLAC1 by Western blot at 1 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

Gene ID	10761
Other Names	Placenta-specific protein 1, PLAC1 {ECO:0000312 EMBL:AAG22596.1}
Target/Specificity	PLAC1;
Reconstitution & Storage	PLAC1 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	PLAC1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLAC1 {ECO:0000312 EMBL:AAG22596.1}
Function	May play a role in placental development.
Cellular Location	Secreted.
Tissue Location	Expressed in placenta. Localizes primarily to differentiated syncytiotrophoblast throughout gestation as well as to a small population of villous cytotrophoblasts. Also detected in maternal blood and rapidly disappears following delivery, but is not detected in other adult or fetal tissues examined.

Background

PLAC1 Antibody: PLAC1 was initially identified as a protein expressed specifically in the placenta and other cells derived from the trophoblast lineage during embryonic development, but has also been found to be expressed ectopically in a wide range of human malignancies, particularly breast cancers. PLAC1 is a membrane-associated protein that is thought to serve a receptor-like function modulating cell-cell or ligand receptor interactions unique to the maternal-placental interface. Decreased expression of PLAC1 is associated with decreased expression of cyclin D1 and reduced expression of AKT kinase, which, combined with the fact that PLAC1 is expressed on the surface of cancer cells, suggests that PLAC1 may be an effective candidate for immunotherapeutic treatments of cancer.

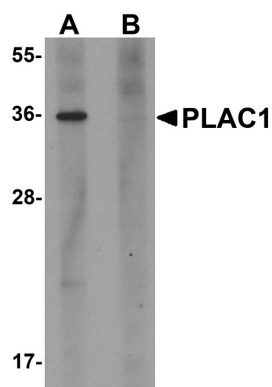
References

Cocchia M, Humber R, Pantano S, et al. PLAC1, an Xq26 gene with placenta-specific expression. *Genomics* 2000; 68:305-12.

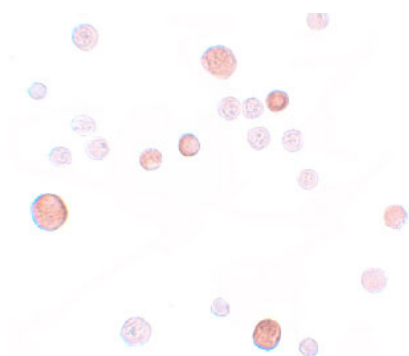
Koslowski M, Sahin U, Mitnacht-Kraus R, et al. A placenta-specific gene ectopically activated in many human cancers is essentially involved in malignant cell processes. *Cancer Res.* 2007; 67:9528-34.

Fant M, Weisoly DL, Cocchia M, et al. PLAC1, a trophoblast-specific gene, is expressed throughout pregnancy in the human placenta and modulated by keratinocyte growth factor. *Mol. Reprod. Dev.* 2002; 63:430-6.

Images



Western blot analysis of PLAC1 in human placenta tissue lysate with PLAC1 antibody at 1 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of PLAC1 in HeLa cells with PLAC1 antibody at 10 $\mu\text{g/mL}$.



Immunofluorescence of PLAC1 in HeLa cells with PLAC1 antibody at 20 $\mu\text{g/mL}$.

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