

Trophinin Antibody
Catalog # ASC11944**Specification**

Trophinin Antibody - Product Information

Application	IHC
Primary Accession	O12816
Other Accession	NP_001034794 , 7216
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 78, 157 kDa

Application Notes	Observed: 94 kDa KDa Trophinin antibody can be used for detection of Trophinin by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry at 10 µg/ml.
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Trophinin Antibody - Additional InformationGene ID **7216****Target/Specificity**

Trophinin antibody was raised against a 16 amino acid peptide near the amino terminus of human Trophinin.

The immunogen is located within amino acids 390 - 440 of Trophinin.

Reconstitution & Storage

Trophinin antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

Trophinin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Trophinin Antibody - Protein Information

Name TRO

Synonyms KIAA1114, MAGED3

Function

Could be involved with bystin and tastin in a cell adhesion molecule complex that mediates an initial attachment of the blastocyst to uterine epithelial cells at the time of the embryo implantation. Directly responsible for homophilic cell adhesion.

Tissue Location

Strong expression at implantation sites. Found in the placenta from the sixth week of pregnancy. Was localized in the cytoplasm of the syncytiotrophoblast in the chorionic villi and in endometrial decidual cells at the uteroplacental interface. After week 10, the level decreased and then

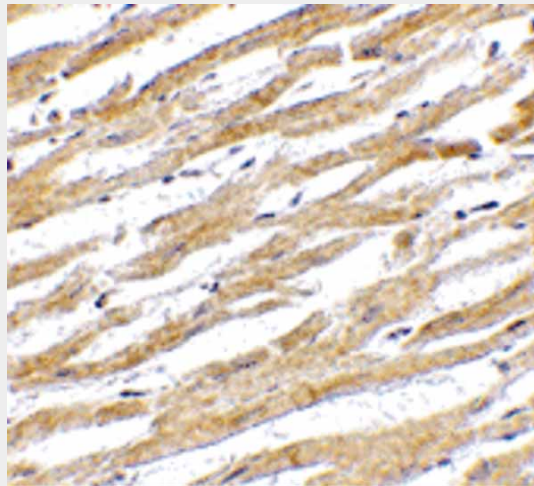
disappeared from placental villi. Also found in macrophages

Trophinin 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](#)

Trophinin Antibody - Images



Immunohistochemistry of PD-L1 in human heart tissue with PD-L1 antibody at 2.5 μ g/mL.

Trophinin Antibody - Background

Trophinin, also known as TRO or MAGED3, is an apical cell adhesion molecule that is implicated in the initial attachment during the process of embryo implantation and functions by mediating cell adhesion between trophoblastic and endometrial epithelial cells (1,2). Trophinin is a membrane protein expressed in chorionic villi trophoblasts and in maternal endometrial epithelial cells in an implantation-dependent manner and interacts with Bystin and Tastin, facilitating cell adhesion and embryo implantation (3,4). The induction of Trophinin expression may be a useful method for improving implantation rates and can be a potential diagnostic factor and biomarker for human cancer (4,5).

Trophinin Antibody - References

- Fukuda MN, Sato T, Nakayama J, et al. Trophinin and tastin, a novel cell adhesion molecule complex with potential involvement in embryo implantation. *Genes Dev.* 1995; 9:1199-210.
- Ma L, Yin M, Wu X, et al. Expression of trophinin and bystin identifies distinct cell types in the germinal zones of adult rat brain. *Eur. J. Neurosci.* 2006; 23:2265-76.
- Tamura N, Sugihara K, Akama TO, et al. Trophinin-mediated cell adhesion induces apoptosis of human endometrial epithelial cells through PKC-d. *Cell Cycle* 2011; 10:135-43.

Chen KY, Lee YC, Lai JM, et al. Identification of trophinin as an enhancer for cell invasion and a prognostic factor for early stage lung cancer. *Eur. J. Cancer.* 2007; 43:782-90.