

VTCN1 Antibody
Catalog # ASC11602

Specification

VTCN1 Antibody - Product Information

Application	WB
Primary Accession	Q7Z7D3
Other Accession	NP_078902 , 99028881
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 31 kDa KDa
Application Notes	VTCN1 antibody can be used for detection of VTCN1 by Western blot at 1 - 2 µg/mL.

VTCN1 Antibody - Additional Information

Gene ID	79679
Target/Specificity	
VTCN1;	

Reconstitution & Storage

VTCN1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

VTCN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

VTCN1 Antibody - Protein Information

Name VTCN1 {ECO:0000312|EMBL:EAW56672.1}

Function

Negatively regulates T-cell-mediated immune response by inhibiting T-cell activation, proliferation, cytokine production and development of cytotoxicity. When expressed on the cell surface of tumor macrophages, plays an important role, together with regulatory T- cells (Treg), in the suppression of tumor-associated antigen-specific T-cell immunity. Involved in promoting epithelial cell transformation.

Cellular Location

Cell membrane; Single-pass type I membrane protein. Note=Expressed at the cell surface. A soluble form has also been detected. {ECO:0000255, ECO:0000269|PubMed:12818165, ECO:0000269|PubMed:15878339, ECO:0000269|PubMed:16782226}

Tissue Location

Overexpressed in breast, ovarian, endometrial, renal cell (RCC) and non-small-cell lung cancers (NSCLC). Expressed on activated T- and B-cells, monocytes and dendritic cells, but not expressed in most normal tissues (at protein level). Widely expressed, including in kidney, liver, lung, ovary,

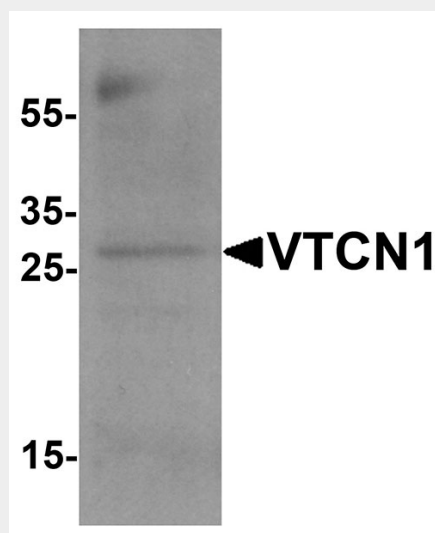
placenta, spleen and testis

VTCN1 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](#)

VTCN1 Antibody - Images



Western blot analysis of VTCN1 in EL4 cell lysate with VTCN1 antibody at 1 μ g/mL.

VTCN1 Antibody - Background

VTCN1 Antibody: T cell immunity plays a critical role in host immune surveillance of tumour cell growth and metastatic spread. VTCN1, also known as B7-H4, is a member of the B7 family of immune regulatory molecules. Expressed primarily on the membrane of lymphoid cells, VTCN1 is an immunoinhibitory protein that interacts with receptors on the surface of T lymphocytes, thus mediating cellular and humoral immune responses. Overexpression of VTCN1 is associated with certain malignancies, including ovarian and breast cancer, which may be a mechanism by which tumour cells suppress T cell immunity and facilitate tumour progression. VTCN1 may thus be a useful biomarker for the early detection of ovarian cancer.

VTCN1 Antibody - References

Flies DB and Chen L. The new B7s: playing a pivotal role in tumor immunity. *J. Immunother.* 2007; 30:251-60.

Sica GL, Choi IH, Zhu G, et al. B7-H4, a molecule of the B7 family, negatively regulates T cell immunity. *Immunity* 2003; 18:849-61

Zang X, Loke P, Kim J, et al. B7x: a widely expressed B7 family member that inhibits T cell

activation. Proc. Natl. Acad. Sci. USA 2003; 100:10388 - 92.

Salceda S, Tang T, Kmet M, et al. The immunomodulatory protein B7-H4 is overexpressed in breast and ovarian cancers and promotes epithelial cell transformation. Exp. Cell Res. 2005; 306:128-41.