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VTCN1 Antibody

Catalog # ASC11602

Product Information

Application	WB, E
Primary Accession	Q7Z7D3
Other Accession	NP_078902, 99028881
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	30878
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	VTCN1 antibody can be used for detection of VTCN1 by Western blot at 1 - 2 g/mL.

Additional Information

Gene ID	79679
Other Names	V-set domain-containing T-cell activation inhibitor 1, B7 homolog 4, B7-H4, B7h.5, Immune costimulatory protein B7-H4, Protein B7S1, T-cell costimulatory molecule B7x, VTCN1 {ECO:0000312|EMBL:EAW56672.1}
Target/Specificity	VTCN1;
Reconstitution & Storage	VTCN1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	VTCN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

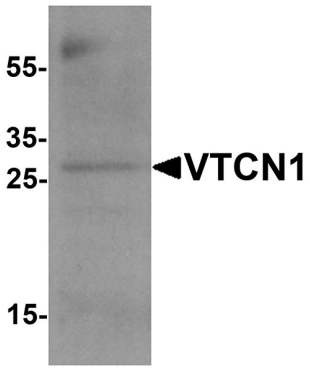
Background

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.

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.

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.