

**Goat Anti-B7-H4 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1134a

**Specification**

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**Goat Anti-B7-H4 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">O7Z7D3</a>
Other Accession	<a href="#">NP_078902</a> , <a href="#">79679</a> , <a href="#">242122 (mouse)</a> , <a href="#">295322 (rat)</a>
Reactivity	<b>Human</b>
Predicted	<b>Mouse, Rat, Dog</b>
Host	<b>Goat</b>
Clonality	<b>Polyclonal</b>
Concentration	<b>100ug/200ul</b>
Isotype	<b>IgG</b>
Calculated MW	<b>30878</b>

**Goat Anti-B7-H4 Antibody - 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}

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-B7-H4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-B7-H4 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

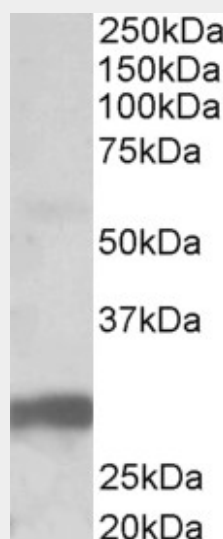
Overexpressed in breast, ovarian, endometrial, renal cell (RCC) and non-small-cell lung cancers (NSCLC). Expressed on activated T- and B-cells, monocytes and dendritic cells, but not expressed in most normal tissues (at protein level). Widely expressed, including in kidney, liver, lung, ovary, placenta,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

### Goat Anti-B7-H4 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](#)

### Goat Anti-B7-H4 Antibody - Images



AF1134a (0.5 µg/ml) staining of Human Pancreas lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-B7-H4 Antibody - Background

B7H4 belongs to the B7 family (see CD80; MIM 112203) of costimulatory proteins. These proteins are expressed on the surface of antigen-presenting cells and interact with ligands (e.g., CD28; MIM 186760) on T lymphocytes.

### **Goat Anti-B7-H4 Antibody - References**

B7-H4 expression promotes tumorigenesis in ovarian cancer. Cheng L, et al. Int J Gynecol Cancer, 2009 Dec. PMID 19955922.

B7-H4 gene polymorphisms are associated with sporadic breast cancer in a Chinese Han population. Zhang J, et al. BMC Cancer, 2009 Nov 11. PMID 19903360.

The negative co-signaling molecule b7-h4 is expressed by human bone marrow-derived mesenchymal stem cells and mediates its T-cell modulatory activity. Xue Q, et al. Stem Cells Dev, 2010 Jan. PMID 19788399.

Identification of a novel susceptibility locus for juvenile idiopathic arthritis by genome-wide association analysis. Hinks A, et al. Arthritis Rheum, 2009 Jan. PMID 19116933.

Serum-soluble B7x is elevated in renal cell carcinoma patients and is associated with advanced stage. Thompson RH, et al. Cancer Res, 2008 Aug 1. PMID 18676826.