

# Rabbit Anti-B7H4 antibody

# SL20711R

Product Name:	B7H4
Chinese Name:	B7-H4抗体
Alias:	B7-H4; B7h4; B7S1; B7x; BC032925; Immune costimulatory protein B7H4; MGC41287; PRO1291; T cell costimulatory molecule B7x; V set domain-containing T cell activation inhibitor 1; VCTN1; VTCN1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow, Rabbit, Sheep,
Applications:	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	28kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human B7H4:151-250/282 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	B7-H4 protein is expressed on the surface of a variety of immune cells and functions as a negative regulator of T cell responses. While B7-H4 mRNA is widely distributed in mouse and human peripheral tissues, cell surface expression of B7-H4 protein is limited and shows an inducible pattern on hematopoietic cells. Putative receptor of B7-H4 can be upregulated on activated T cells. By arresting cell cycle, B7-H4 ligation of T cells

has a profound inhibitory effect on the growth, cytokine secretion, and development of cytotoxicity. Administration of B7-H4Ig into mice impairs antigen-specific T cell responses whereas blockade of endogenous B7-H4 by specific monoclonal antibody promotes T cell responses. B7-H4 thus may participate in negative regulation of cell-mediated immunity in peripheral tissues.

#### 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.

#### **Subcellular Location:**

cell membrane; Single-pass type I membrane protein (Potential). Note=Expressed at the cell surface. A soluble form has also been detected.

# Tissue Specificity:

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.

#### Post-translational modifications:

N-glycosylated.

#### Similarity:

Belongs to the immunoglobulin superfamily. BTN/MOG family. Contains 2 Ig-like V-type (immunoglobulin-like) domains.

#### **SWISS:**

Q7Z7D3

## Gene ID:

79679

#### Database links:

Entrez Gene: 79679Human

Entrez Gene: 242122Mouse

Entrez Gene: 295322Rat

Omim: 608162Human

SwissProt: O7Z7D3Human

SwissProt: Q7TSP5Mouse

SwissProt: Q501W4Rat

<u>Unigene: 546434</u>Human

Unigene: 137467Mouse

Unigene: 160956Rat

## **Important Note:**

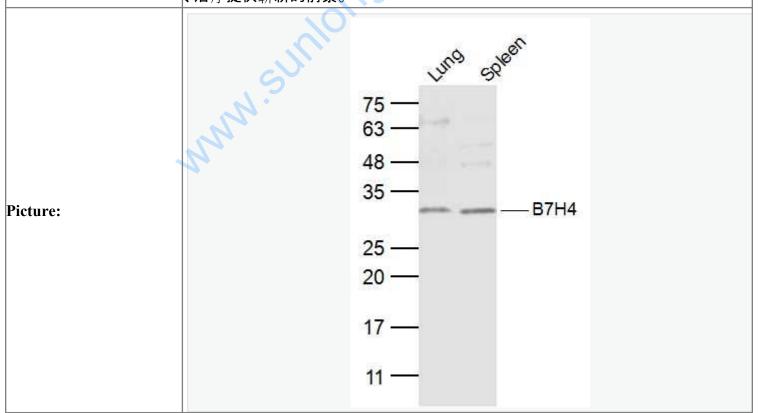
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

B7-H4(B7 Homolog 4)是B7家族中的新成员,它能通过抑制T细胞的增殖、cell factor的产生和细胞周期的进程来负性调控T细胞的免疫应答,其大量表达B7-H4还可以促进epithelial

cells的恶性转化,保护表皮细胞免于失巢凋亡,在Tumour的发生,进展和转归中发挥重要作用.

目前对B7-

H4信号通路的进一步的研究必将为自身免疫性疾病、病毒感染性疾病和器官移植后排斥反应中T细胞介导的免疫应答调控提供了新的途径,同时也为Tumour的诊断、治疗提供崭新的前景。



Sample:

Lung (Mouse) Lysate at 40 ug

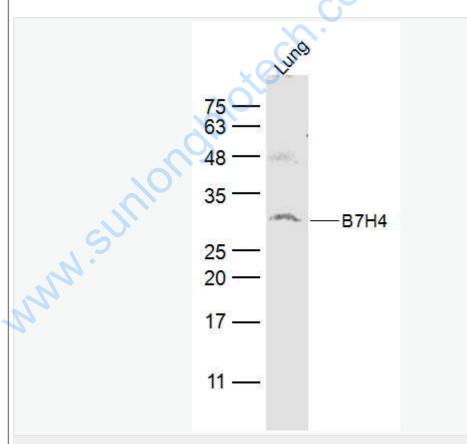
Spleen (Mouse) Lysate at 40 ug

Primary: Anti- B7H4 (SL20711R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 28 kD

Observed band size: 28 kD



Sample:

Lung (Rat) Lysate at 40 ug

Primary: Anti- B7H4 (SL20711R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 28 kD
Observed band size: 28 kD

