



## Rabbit Anti-B7H4 antibody

SL0673R

<b>Product Name:</b>	B7H4
<b>Chinese Name:</b>	B7-H4抗体
<b>Alias:</b>	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.
<b>文献引用</b> <b>PubMed</b> :	<b>Specific References(1)</b>  SL0673R has been referenced in 1 publications. [IF=2.84]Maskey, Ninu, et al. "Impact of neoadjuvant chemotherapy on lymphocytes and co-inhibitory B7-H4 molecule in gastric cancer: low B7-H4 expression associates with favorable prognosis." Tumor Biology (2014): 1-7. <b>IHC-P;Human.</b> <a href="#">PubMed:25260881</a>
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg /testIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	28kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human B7H4:50-100/282
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>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.</p> <p><b>Function:</b> 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.</p> <p><b>Subcellular Location:</b> cell membrane; Single-pass type I membrane protein (Potential). Note=Expressed at the cell surface. A soluble form has also been detected.</p> <p><b>Tissue Specificity:</b> 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.</p> <p><b>Post-translational modifications:</b> N-glycosylated.</p> <p><b>Similarity:</b> Belongs to the immunoglobulin superfamily. BTN/MOG family. Contains 2 Ig-like V-type (immunoglobulin-like) domains.</p> <p><b>SWISS:</b> Q501W4</p> <p><b>Gene ID:</b> 79679</p> <p><b>Database links:</b></p>

[Entrez Gene: 79679](#)Human

[Entrez Gene: 242122](#)Mouse

[Entrez Gene: 295322](#)Rat

[Omim: 608162](#)Human

[SwissProt: Q7Z7D3](#)Human

[SwissProt: Q7TSP5](#)Mouse

[SwissProt: Q501W4](#)Rat

[Unigene: 546434](#)Human

[Unigene: 137467](#)Mouse

[Unigene: 160956](#)Rat

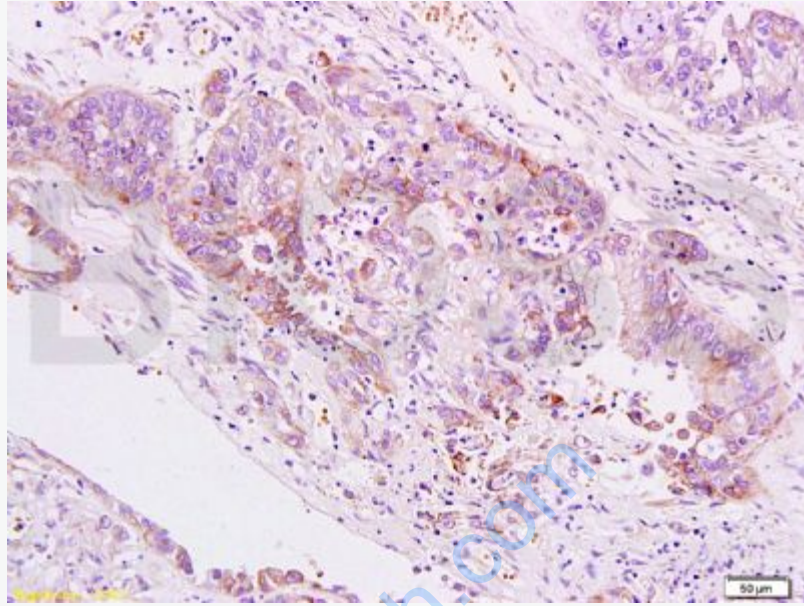
**Important Note:**

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。

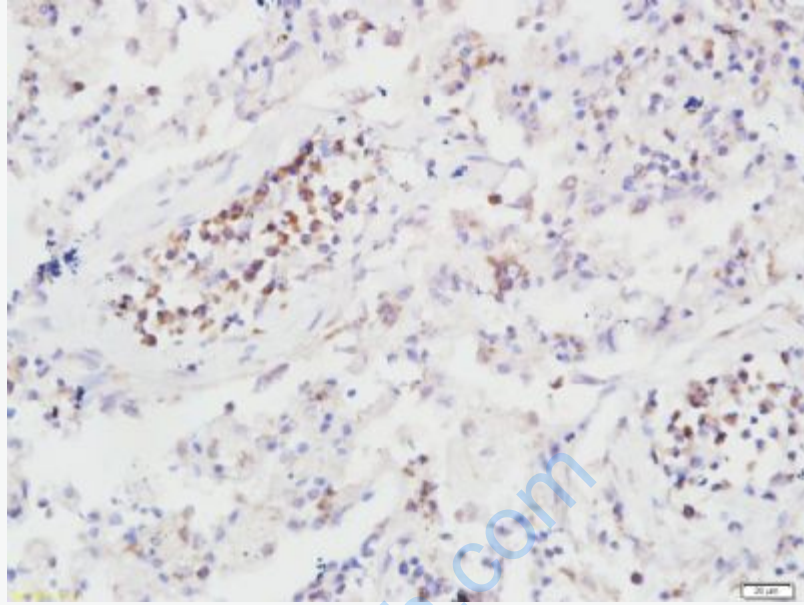


**Picture:**

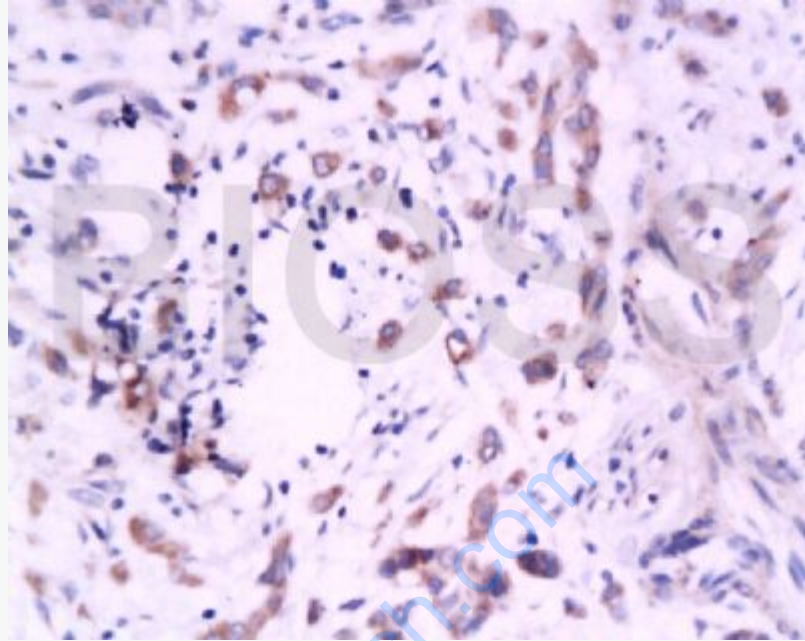
Tissue/cell: human colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-B7H4 Polyclonal Antibody, Unconjugated(SL0673R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



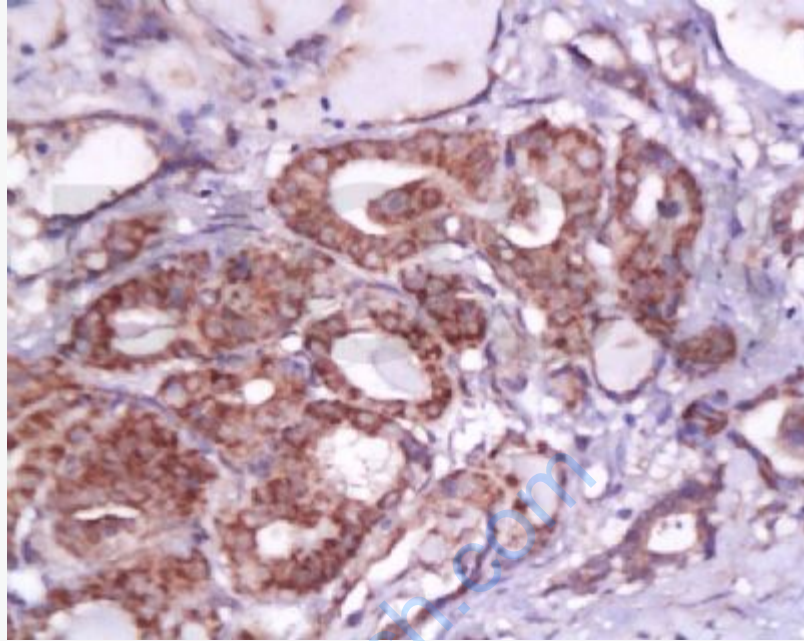
Paraformaldehyde-fixed, paraffin embedded (Human lung cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (B7H4) Polyclonal Antibody, Unconjugated (SL0673R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

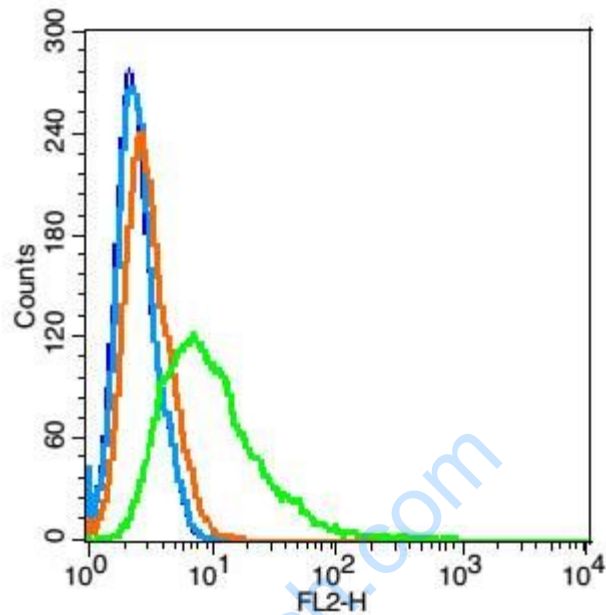
Incubation: Anti-B7H4 Polyclonal Antibody, Unconjugated(SL0673R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human thyroid carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-B7H4 Polyclonal Antibody, Unconjugated(SL0673R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: HeLa(blue).

Primary Antibody:Rabbit Anti-B7H4 antibody(SL0673R), Dilution: 1 $\mu$ g in 100  $\mu$ L  
1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions );

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X  
PBS containing 0.5% BSA.

#### Protocol

The cells were fixed with 2% paraformaldehyde (10 min). Antibody (SL0673R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody of bs-0673R at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.



