

Rabbit Anti-CD272 antibody

SL0624R

Product Name:	CD272
Chinese Name:	B和Tlymphocyte衰减蛋白抗体
Alias:	B and T lymphocyte associated protein; B and T lymphocyte attenuator; B and T lymphocyte associated; BTLA; BTLA1; CD272 antigen; FLJ16065; MGC129743; BTLA_HUMAN; B- and T-lymphocyte attenuator; B- and T-lymphocyte-associated protein; CD272.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg /testICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) 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 B and T-lymphocyte attenuator:221-289/289 <cytoplasmic></cytoplasmic>
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:	B and T lymphocyte attenuator (BTLA), an immunoglobulin domain-containing glycoprotein with two immunoreceptor tyrosine-based inhibitory motifs. BTLA is not expressed by naive T cells, but it is induced during activation and remains expressed on

T helper type 1 (T(H)1) but not T(H)2 cells. Crosslinking BTLA with antigen receptors induces its tyrosine phosphorylation and association with the Src homology domain 2 (SH2)-containing protein tyrosine phosphatases SHP-1 and SHP-2, and attenuates production of interleukin 2 (IL-2). BTLA-deficient T cells show increased proliferation, and BTLA-deficient mice have increased specific antibody responses and enhanced sensitivity to experimental autoimmune encephalomyelitis. B7x, a peripheral homolog of B7, is a ligand of BTLA. Thus, BTLA is a third inhibitory receptor on T lymphocytes with similarities to cytotoxic T lymphocyte-associated antigen 4 (CTLA-4) and programmed death 1 (PD-1).

Function:

Lymphocyte inhibitory receptor which inhibits lymphocytes during immune response.

Subunit:

Interacts with tyrosine phosphatases PTPN6/SHP-1 and PTPN11/SHP-2. Interacts with TNFRSF14/HVEM.

Subcellular Location:

Membrane; Single-pass type I membrane protein (Potential).

Post-translational modifications:

Phosphorylated on Tyr residues by TNFRSF14 and by antigen receptors cross-linking, both inducing association with PTPN6 and PTPN11.
N-glycosylated.

Similarity:

Contains 1 Ig-like V-type (immunoglobulin-like) domain.

SWISS: O7Z6A9

Gene ID:

151888

Database links:

Entrez Gene: 151888 Human

Entrez Gene: 208154 Mouse

Entrez Gene: 407756 Rat

Omim: 607925 Human

SwissProt: O7Z6A9 Human

SwissProt: Q7TSA3 Mouse

SwissProt: Q6PNM1 Rat

Unigene: 445162 Human

Unigene: 38199 Mouse

Unigene: 124474 Rat

Important Note:

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

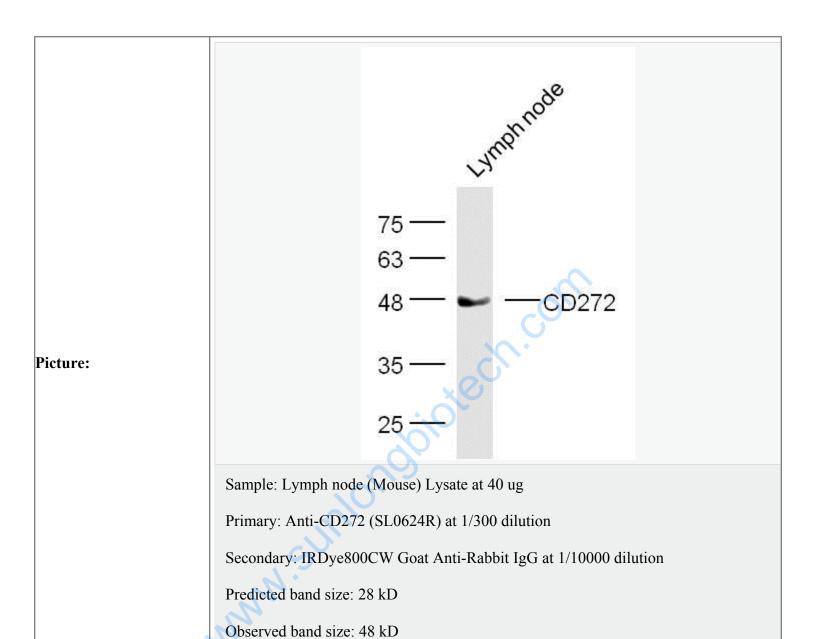
BTLA对T细胞的活化、增殖起着重要的负调控作用, BTLA相应配体为TNFR超家族中的疱疹病毒入侵介质(HVEM),

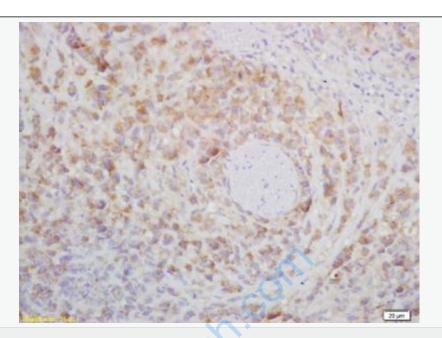
其表达于包括T细胞在内的多种免疫细胞表面。

有学者将他定为CD28的超级族成员, B、Tlymphocyte衰减子-

CD272主要用于细胞信号传导方面的研究。

近来国外学者对BTLA用于抑制Tumour方面的研究也有了新的进展,认为B、Tlymp hocyte衰减子对Tumour的生长有抑制作用,探索新的Tumour免疫治疗有了新的途 径,封闭此途径有可能成为Tumour免疫治疗的新靶点。

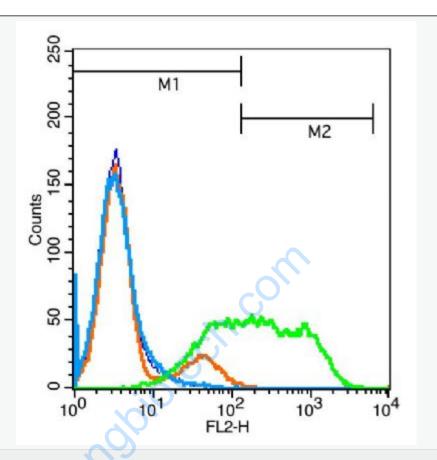




Tissue/cell: mouse lymphoma tissue; 4% Paraformaldehyde-fixed and paraffinembedded;

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 $37\cap$ for 20 min;

Incubation: Anti-CD272/BTLA Polyclonal Antibody, Unconjugated(SL0624R) 1:200, overnight at 4∑C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: Jurkat cells(blue).

Primary Antibody:Rabbit Anti- CD272 antibody(SL0624R), Dilution: 1 μ g in 100 μ 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) . Primary antibody (SL0624R) 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 at 1/200 dilution for 30
min on ice. Acquisition of 20,000 events was performed.

