

BTLA Antibody

Catalog # ASC11697

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q7Z6A9
Other Accession	NP_861445 , 145580621
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	32834
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	BTLA antibody can be used for detection of BTLA by Western blot at 1 - 2 μ g/ml.

Additional Information

Gene ID	151888
Other Names	B- and T-lymphocyte attenuator, B- and T-lymphocyte-associated protein, CD272, BTLA
Target/Specificity	BTLA; BTLA antibody is human specific. At least two isoforms of BTLA are known to exist.
Reconstitution & Storage	BTLA antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	BTLA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BTLA {ECO:0000303 PubMed:12796776, ECO:0000312 HGNC:HGNC:21087}
Function	Inhibitory receptor on lymphocytes that negatively regulates antigen receptor signaling via PTPN6/SHP-1 and PTPN11/SHP-2 (PubMed: 12796776 , PubMed: 14652006 , PubMed: 15568026 , PubMed: 18193050). May interact in cis (on the same cell) or in trans (on other cells) with TNFRSF14 (PubMed: 19915044). In cis interactions, appears to play an immune regulatory role inhibiting in trans interactions in naive T cells to maintain a resting state. In trans interactions, can predominate during adaptive immune response to provide survival signals to effector T cells (PubMed: 19915044).
Cellular Location	Cell membrane; Single-pass type I membrane protein

Background

The B- and T-lymphocyte attenuator (BTLA) protein is a member of the immunoglobulin superfamily containing a single immunoglobulin (Ig) domain (1). Like other cohibitory receptors such as CTLA-4 and PD-1, BTLA functions as a receptor that relays inhibitory signals to suppress the immune response, and can inhibit LPS-induced endotoxic shock by suppressing TLR4 signaling in innate immune cells (1,2). Polymorphisms in this gene have also been associated with an increased risk of rheumatoid arthritis (3).

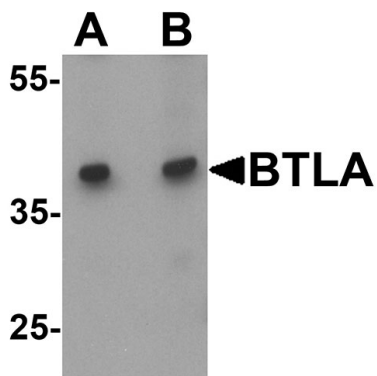
References

Carreno BM and Collins M. BTLA: a new inhibitory receptor with a B7-like ligand. *Trends Immunol.* 2003; 24:524-7.

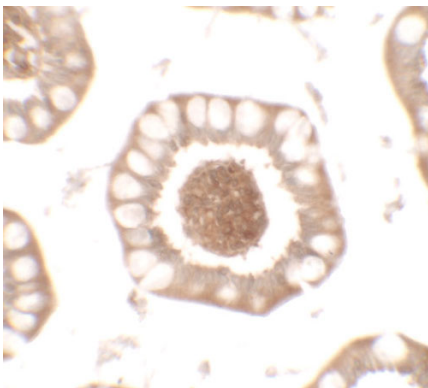
Kobayashi Y, Iwata A, Suzuki K, et al. B and T lymphocyte attenuator inhibits LPS-induced endotoxic shock by suppressing Toll-like receptor 4 signaling in innate immune cells. *Proc. Natl. Acad. Sci. USA* 2013; 110:5121-6.

Lin SC, Kuo CC, and Chan CH. Association of a BTLA gene polymorphism with a risk of rheumatoid arthritis. *J. Biomed. Sci.* 2006; 13:853-60.

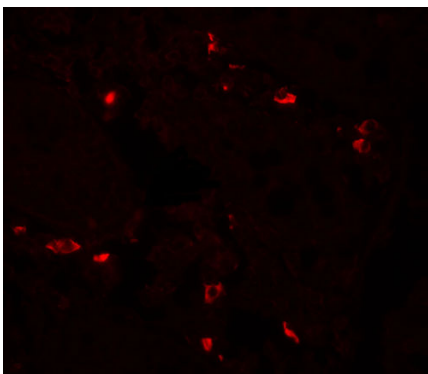
Images



Western blot analysis of BTLA in Jurkat cell lysate at (A) 1 and (B) 2 $\mu\text{g/ml}$.



Immunohistochemistry of BTLA in human small intestine tissue with BTLA antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of BTLA in human small intestine tissue with BTLA antibody at 20 $\mu\text{g/mL}$.

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