10320 Camino Santa Fe, Suite G
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BTLA Antibody
Catalog # ASC11697

Specification

BTLA Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q7Z6A9
Other Accession	NP_861445, 145580621
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 32 kDa** **Observed: 40kDa KDa**
Application Notes	**BTLA antibody can be used for detection of BTLA by Western blot at 1 - 2 µg/ml.**

BTLA Antibody - Additional Information

Gene ID	**151888**

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℃ for three months and -20℃, stable for up to one year.

Precautions
BTLA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

BTLA Antibody - 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

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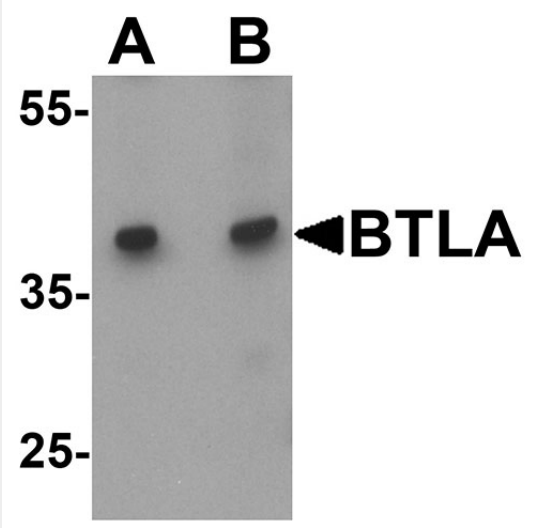
Cell membrane; Single-pass type I membrane protein

BTLA Antibody - Protocols

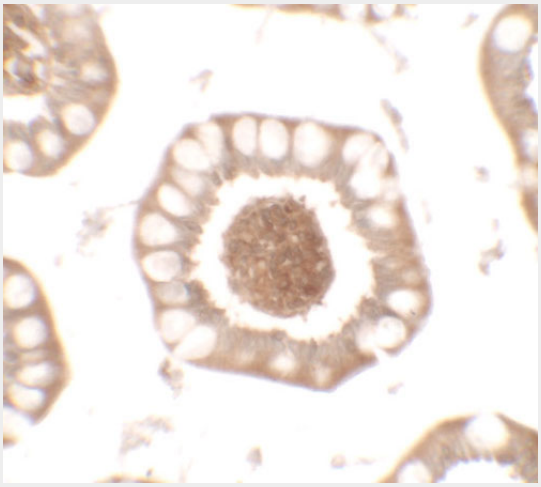
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BTLA Antibody - Images



Western blot analysis of BTLA in Jurkat cell lysate at (A) 1 and (B) 2 µg/ml.



Immunohistochemistry of BTLA in human small intestine tissue with BTLA antibody at 2.5 µg/mL.

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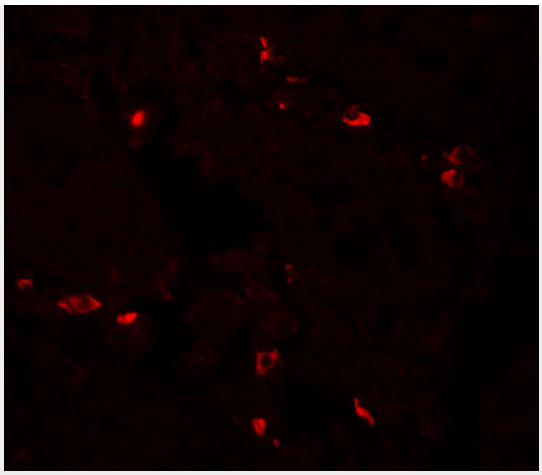

Immunofluorescence of BTLA in human small intestine tissue with BTLA antibody at 20 µg/mL.

BTLA Antibody - 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 coihibitory 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).

BTLA Antibody - 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.