# **Elabscience**®

# APC Anti-Mouse CD272 Antibody[PK18.6]

Catalog No.E-AB-F1024UEStorageStore at 2~8°C, Avoid freeze / thaw cycles

ReactivityMouseApplicationsFCM

Important Note: Centrifuge before opening to ensure complete recovery of vial contents.

### **Antigen Information**

Alternate Names B- and T-lymphocyte attenuator, Btla, B- and T-lymphocyte-associated protein, CD272, Btla **Uniprot ID** Q7TSA3 Background CD272, also known as B and T lymphocyte attenuator (BTLA), is an Ig superfamily co-inhitory receptor with structural similarity to programmed cell death 1 (PD-1) and CTLA-4. BTLA is expressed on B cells, T cells, macrophages, dendritic cells, NKT cells, and NK cells. Engagement of BTLA by its ligand herpes virus entry mediator (HVEM) is critical for negatively regulating immune response. The absence of BTLA with HVEM inhibitory interactions leads to increased experimental autoimmune encephalomyelitis severity, enhanced rejection of partially mismatched allografts, an increased CD8+ memory T cell population, increased severity of colitis, and reduced effectiveness of T regulatory cells. BTLA plays an important role in the induction of peripheral tolerance of both CD4+ and CD8+ T cells in vivo. Tolerant T cells have significantly higher expression of BTLA compared with effectors and naïve T cells. BTLA may cooperate with CTLA-4 and PD-1 to control T cell tolerance and autoimmunity. It was reported that BTLA may regulate T cell function by binding to B7-H4, but further studies are needed to confirm. The existence of three distinct BTLA alleles has been reported.

#### **Product Details**

Form	Liquid
Concentration	0.2 mg/mL
Size	25µg/100µg
Clone No.	PK18.6
Host	Rat
Isotype	Rat IgG1, ĸ
Reactivity	Mouse
Application	FCM
Isotype Control	APC Rat IgG1, κ Isotype Control[HRPN] [Product E-AB-F09823E]
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% stabilizer and 1% protein protectant.
Shipping	Biological ice pack at 4 °C
Stability & Storage	Keep as concentrated solution.
	Store at 2~8°C and protected from prolonged exposure to light.Do not freeze.
	This product is guaranteed up to one year from purchase.

For Research Use Only

Thank you for your recent purchase. If you would like to learn more about antibodies, please visit www.elabscience.com. Focus on your research Service for life science

Applications:Activ- Activation; Block- Blocking; Separation- Cell Separation ; Cell Sep-Neg- Cell Separation by Negative Selection; FA-Functional Assay; Neut- Neutralization; Stim- Stimulation; FCM- Flow Cytometry; ICFCM: Intracellular Staining for Flow Cytometry; WB-Western Blotting; IHC- Immunohistochemistry; IF- Immunofluorescence; IP- Immunoprecipitation

# **Elabscience**®

# Fluorophore

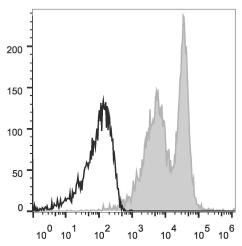
#### **Conjugation:** APC

APC is designed to be excited by the Red (627-640 nm) laser and detected using an optical filter centered near 660 nm (e.g., a 660/20 nm bandpass filter).

## **Recommended usage**

Each lot of this antibody is quality control tested by flow cytometric analysis. Please check your vial before the experiment. Since applications vary, the appropriate dilutions must be determined for individual use. We suggest each investigator should titrate the reagent to obtain optimal results [The recommended concentration is  $0.1-1 \ \mu g/10^6$  cells in  $100 \ \mu L$  volume].

## **Product data**



C57BL/6 murine splenocytes are stained with APC Anti-Mouse CD272 Antibody (filled gray histogram). Unstained splenocytes (empty black histogram) are used as control.

### **Related Information**

- 1. Sample Preparation for Flow Cytometry <u>https://www.elabscience.com/List-detail-5594.html</u>
- 2. Staining Cell Surface Targets for Flow Cytometry https://www.elabscience.com/List-detail-5568.html
- 3. Flow Cytometry Troubleshooting Tips https://www.elabscience.com/List-detail-5593.html
- 4. How to select the appropriate detection channel through the spectrogram? <u>https://www.elabscience.com/List-detail-459742.html</u>

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