

## PE/Cyanine5 Anti-Mouse CD272 Antibody[6F7]

Catalog Number: AN00415UG

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

### Description

<b>Reactivity</b>	Mouse
<b>Host</b>	Mouse
<b>Isotype</b>	Mouse IgG1, κ
<b>Clone No.</b>	6F7
<b>Isotype Control</b>	PE/Cyanine5 Mouse IgG1, κ Isotype Control[MOPC-21] [Product E-AB-F09792G]
<b>Conjugation</b>	PE/Cyanine 5
<b>Conjugation Information</b>	PE/Cyanine5 is designed to be excited by the Blue (488 nm), Green (532 nm) and yellow-green (561 nm) lasers and detected using an optical filter centered near 670 nm (e.g., a 690/50 nm bandpass filter).
<b>Storage Buffer</b>	Phosphate buffered solution, pH 7.2, containing 0.09% sodium azide and 1% BSA.

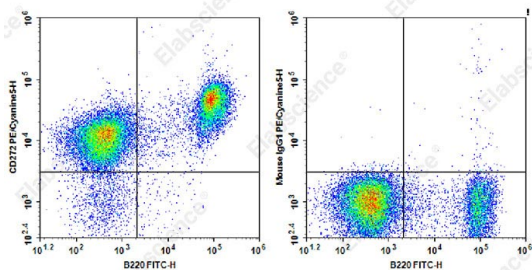
### Applications

FCM

### Recommended usage

Each lot of this antibody is quality control tested by flow cytometric analysis. The amount of the reagent is suggested to be used 5 μL of antibody per test (million cells in 100 μL staining volume or per 100 μL of whole blood). Please check your vial before the experiment. Since applications vary, the appropriate dilutions must be determined for individual use.

### Data



Staining of C57BL/6 murine splenocytes cells with FITC Anti-Mouse B220 Antibody and PE/Cyanine5 Anti-Mouse CD272 Antibody[6F7] (left) or PE/Cyanine5 Mouse IgG1, κ Isotype Control (right). Total viable cells were used for analysis.

### Preparation & Storage

<b>Storage</b>	Keep as concentrated solution. This product can be stored at 2-8°C for 12 months. Please protected from prolonged exposure to light and do not freeze.
<b>Shipping</b>	Ice bag

### Antigen Information

<b>Alternate Names</b>	BTLA;B and T lymphocyte attenuator
<b>Uniprot ID</b>	Q7TSA3
<b>Gene ID</b>	208154

### For Research Use Only

## Background

B and T lymphocyte attenuator (BTLA) is an Ig superfamily coinhibitory 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, reduced effectiveness of T regulatory cells. BTLA takes an important role in the induction of peripheral tolerance of both CD4+ and CD8+ T cells in vivo. Tolerant T cells have significant up-regulated expression of BTLA compared with effector 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 was reported. The BTLA antibody reacts with mouse BTLA from both BALb/c and C57BL/6 strains.