

Recombinant Protein Technical Manual

Recombinant Human BTLA/CD272 Protein (His Tag)(Active) RPES4412

Product Data:

Product SKU: RPES4412 **Size:** 10μg

Species: Human Cells

Uniprot: Q7Z6A9-2

Protein Information:

Molecular Mass: 14.79 kDa

AP Molecular Mass: 30 kDa

Tag: C-His

Bio-activity: Immobilized Human HVEM at 1μg/ml(100 μl/well) can bind Human BTLA-His.

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at $4-7^{\circ}$ C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: B- and T-Lymphocyte Attenuator; B- and T-Lymphocyte-Associated Protein;

CD272; BTLA

Immunogen Information:

Sequence: Lys31-Leu150

Background:

B- and T-Lymphocyte Attenuator (BTLA) is a single-pass type I membrane protein containing 1 Ig-like V-type (immunoglobulin-like) domain. BTLA expression is induced during activation of T cells, and BTLA remains expressed on Th1 cells but not Th2 cells. Like PD1 and CTLA4, BTLA interacts with a B7 homolog, B7H4. However, unlike PD and CTLA-4, BTLA displays T-Cell inhibition via interaction with tumor necrosis family receptors (TNF-R), not just the B7 family of cell surface receptors. BTLA is a lymphocyte inhibitory receptor that inhibits lymphocytes during immune response. BTLA also is a ligand for tumor necrosis factor (receptor) superfamily, member 14 (TNFRSF14), also known as herpes virus entry mediator (HVEM). BTLA-HVEM complexes negatively regulate T-cell immune responses.