

BTLA Protein, Human, Recombinant (His & Avi)

General Information

Synonyms:	BTLA;BTLA1;FLJ16065;CD272;MGC129743
Protein Construction:	Lys31-Ser150
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q7Z6A9-1
Molecular Weight:	16.7 kDa (predicted). Due to glycosylation, the protein migrates to 35-45 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	<ol style="list-style-type: none">1. Immobilized Human BTLA, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-BTLA Antibody, hFc Tag with the EC50 of 9.1ng/ml determined by ELISA (QC Test).2. Anti-BTLA antibody captured on Protein A chip, can bind Human BTLA, His Tag with an affinity constant of 0.99nM as determined in a SPR assay.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1 EU/µg by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 µg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

B- and T-lymphocyte attenuator (BTLA; CD272) is a 35 kDa type I transmembrane glycoprotein in the CD28 family of T cell costimulatory molecules. BTLA is an inhibitory receptor on lymphocytes that negatively regulates antigen

receptor signaling via PTPN6/SHP-1 and PTPN11/SHP-2. BTLA may interact in cis (on the same cell) or in trans (on other cells) with TNFRSF14.

Reference

Haymaker C L, et al. BTLA marks a less-differentiated tumor-infiltrating lymphocyte subset in melanoma with enhanced survival properties[J]. OncoImmunology, 2015, 4(8):e1014246.