## Product Data:

Product SKU: RPES4935
Species: Human

Size: $10 \mu \mathrm{~g}$
Expression host: Human Cells

Uniprot: P33681

Protein Information:
Molecular Mass: $\quad 50.5 \mathrm{kDa}$
AP Molecular Mass: 70-95 kDa
Tag: C-mFc
Bio-activity:
Purity: $\quad>95 \%$ as determined by reducing SDS-PAGE.
Endotoxin: <1.0 EU per $\mu \mathrm{g}$ as determined by the LAL method.
Storage: Lyophilized protein should be stored at $<-20^{\circ} \mathrm{C}$, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at $4-7^{\circ} \mathrm{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $<-20^{\circ} \mathrm{C}$ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.
Formulation: Lyophilized from a $0.2 \mu \mathrm{~m}$ filtered solution of PBS, pH 7.4 .
Reconstitution: Please refer to the printed manual for detailed information.

## Application:

Synonyms:
CD80; Activation B7 antigen; B7; BB1; CD28LG1; CD28LGB7 antigen; T-lymphocyte activation antigen CD80;B7;B7.1;CD28LG;LAB7

Immunogen information:
Sequence: Val35-Leu242

## Background:

Cluster of Differentiation 80, also called B7, is a member of cell surface immunoglobulin superfamily which plays key, yet distinct roles in the activation of T cells. It is the ligand for two different proteins on the T cell surface: CD28 and CTLA-4. Studies have shown that CTLA-4 binds mostly to CD80. The structure presents two extracellular domains: a membrane distal variable-like domain ( lg V ) and a membrane proximal Ig constant-like domain ( $\mathrm{Ig} C$ ) along with an intracellular domain. Both $\operatorname{lgV}$ and $\operatorname{lgC}$ consist of anti-parallel beta sandwiches joined by a short linker region. CD80 is mostly expressed on the surface of antigen-presenting cells including activated $B$ cells, macrophages and dendritic cells.

