

Recombinant Protein Technical Manual Recombinant Mouse ICOS Ligand/ICOSL Protein (His Tag) RPES1612

Product Data:

Product SKU: RPES1612 Size: 10μg

Species: Mouse Expression host: Human Cells

Uniprot: Q9JHJ8

Protein Information:

Molecular Mass: 27.1 kDa

AP Molecular Mass: 40-60 kDa

Tag: C-His

Bio-activity:

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°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 PBS, pH7.4.

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

Application:

Synonyms: B7 homolog 2; B7-H2;B7-like protein GI50; B7RPLICOS; CD275; CD275 antigen;

ICOS ligand; ICOSL; ICOS-L; inducible T-cell co-stimulator ligand; B7RP; CD275;

GL50; ICOSL; ICOSLG; B7H2; B7RP1; ICOS Ligand

Immunogen Information:

Sequence: Glu47-Lys279

Background:

Mouse ICOS ligand(B7-H2) is an approximately transmembrane glycoprotein in the B7 family of immune regulatory molecules. B7-H2 is expressed on antigen presenting cells such as B cells, macrophages, monocytes, and dendritic cells. It binds to ICOS on activated T cells, leading to both positive and negative effects on immune responses including its own down-regulation. The B7-H2 interaction with ICOS is costimulatory for T cell proliferation as well as the development of B cells, plasma cells, follicular helper T cells and germinal centers. B7-H2 contributes to the development of allergic asthma by enhancing Th2 biased immune responses, limiting Th17 responses, and promoting eosinophilic infiltration into the lung. Its activation of ICOS on Treg limits pulmonary inflammation and airway hyperresponsiveness, promotes the development of inhalational tolerance, and impairs antitumor immunity. In the thyroid, B7-H2 is upregulated on thyrocytes during inflammation and promotes their proliferation and production of thryoid hormones.