



Recombinant Protein Technical Manual

Recombinant Human LCP2 Protein (His Tag, N-T7 Tag)

RPES3824

Product Data:

Product SKU: RPES3824

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: Q13094

Protein Information:

Molecular Mass: 62.6 kDa

AP Molecular Mass: 70 kDa

Tag: C-6His

Bio-activity:

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

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM Tris, 150mM NaCl, 20% glycerol, pH 8.5.

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

Application:

Synonyms: Lymphocyte cytosolic protein 2; SH2 domain-containing leukocyte protein of 76 kDa; SLP-76 tyrosine phosphoprotein; SLP76; LCP2

Immunogen Information:

Sequence: Met 1-Pro533

Background:

Lymphocyte cytosolic protein 2 (LCP2) contains a SAM domain and a SH2 domain. It is highly expressed in spleen, thymus and peripheral blood leukocytes, T-cell and monocytic cell lines, but expressed at lower level in B-cell lines. LCP2 was originally identified as a substrate of the ZAP-70 protein tyrosine kinase following T cell receptor (TCR) ligation in the leukemic T cell line Jurkat. It is phosphorylated after T-cell receptor activation by ZAP70, ITK and TXK, which leads to the up-regulation of Th1 preferred cytokine IL-2 during post-translational modification. Studies using LCP2-deficient T cell lines or mice have provided strong evidence that SLP-76 plays a positive role in promoting T cell development and activation as well as mast cell and platelet function.