



Recombinant Protein Technical Manual
Recombinant Human LAMTOR2/ROBLD3/MAPBPIP
Protein (His Tag)
RPES2241

Product Data:

Product SKU: RPES2241

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: Q9Y2Q5

Protein Information:

Molecular Mass: 15 kDa

AP Molecular Mass: 13 kDa

Tag: N-His

Bio-activity:

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°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 sterile PBS, pH 7.4

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

Application:

Synonyms: ENDAP;HSPC003;MAPBPIP;MAPKSP1AP;p14;Ragulator2;ROBLD3;RP11-336K24.9

Immunogen Information:

Sequence: Met 1-Ser 125

Background:

Ragulator complex protein LAMTOR2, also known as Endosomal adaptor protein p14, Late endosomal / lysosomal Mp1-interacting protein, Late endosomal / lysosomal adaptor and MAPK and MTOR activator 2, Mitogen-activated protein-binding protein-interacting protein, Roadblock domain-containing protein 3, LAMTOR2, MAPBPIP and ROBLD3, is a protein which belongs to the GAMAD family. LAMTOR2 / ROBLD3 is a regulator of the TOR pathway, a signaling cascade that promotes cell growth in response to growth factors, energy levels, and amino acids. As part of the Ragulator complex, LAMTOR2 / ROBLD3 recruits the Rag GTPases and the mTORC1 complex to lysosomes, a key step in activation of the TOR signaling cascade by amino acids. LAMTOR2 / ROBLD3 is an adapter protein that enhances the efficiency of the MAP kinase cascade facilitating the activation of MAPK2. Defects in LAMTOR2 are the cause of immunodeficiency due to defect in MAPBP-interacting protein (ID-MAPBPIP). This form of primary immunodeficiency syndrome includes congenital neutropenia, partial albinism, short stature and B-cell and cytotoxic T-cell deficiency.