# Recombinant Human LAMTOR2/ROBLD3/MAPBPIP Protein (His Tag)

### Catalog No. PKSH030802

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description		
Synonyms	ENDAP;HSPC003;MAPBPIP;MAPKSP1AP;p14;Ragulator2;ROBLD3;RP11-336 K24.9	
Species	Human	
Expression Host	E.coli	
Sequence	Met 1-Ser 125	
Accession	Q9Y2Q5-1	
Calculated Molecular Weight	15 kDa	
Observed molecular weight	13 kDa	
Tag	N-His	
Bioactivity	Not validated for activity	
Properties		
Purity	> 97 % as determined by reducing SDS-PAGE.	
Endotoxin	Please contact us for more information.	
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.	
Reconstitution	Please refer to the printed manual for detailed information.	
Data		

KDa	MK	R
116	-	
66.2	-	
45.0	-	
35.0	-	
25.0	-	
18.4		
14.4	-	-

> 97 % as determined by reducing SDS-PAGE.

## Background

Ragulator complex protein LAMTOR2, also known as Endosomal adaptor protein p14, Late endosomal / lysosomal

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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 theGAMAD 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.

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