Data Sheet (Cat.No.TMPY-03181)

TargetMol

Reticulocalbin 3/RCN3 Protein, Human, Recombinant (His)

General Information

Synonyms:	RLP49;reticulocalbin 3, EF-hand calcium binding domain
Protein Construction:	A DNA sequence encoding the human RCN3 (Q96D15) (Met1-His324) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Lys 21
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q96D15
Molecular Weight:	36.2 kDa (predicted); 47 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

RCN3 belongs to the CREC family which contains multiple EF-hand Ca2+-binding proteins localized to the secretory pathway. RCN3 sequence is characterized by the presence of five Arg-Xaa-Xaa-Arg motifs, which represents the target sequence of subtilisin-like proprotein convertases(SPCs). SPCs are a family of seven structurally related serine endoproteases that are involved in the proteolytic activation of proproteins.RCN3 is transiently associated with proPACE4, but not with mature PACE4. Inhibition of PACE4 maturation by a Ca2+ ionophore resulted in

accumulation of the proPACE4-RCN-3 complex in cells. It has been proposed that elective and transient association of RCN3 with the precursor of PACE4 plays an important role in the biosynthesis of PACE4.

Reference

Danielsen JM, et al. (2011) Mass spectrometric analysis of lysine ubiquitylation reveals promiscuity at site level. Mol Cell Proteomics. 10(3):M110.003590.

Rual JF, et al. (2005) Towards a proteome-scale map of the human protein-protein interaction network. Nature. 437(7062):1173-8.

Kamatani Y, et al. (2010) Genome-wide association study of hematological and biochemical traits in a Japanese population. Nat Genet. 42(3):210-5.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481