

Human RHEB Protein (His Tag)

Catalog Number: 11382-H07B



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

RHEB2

Protein Construction:

A DNA sequence encoding the human RHEB (Q15382)(Met1-Cys181) was fused with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His

Molecular Mass:

The recombinant human RHEB consists of 199 amino acids and has a calculated molecular mass of 22.4 kDa. The recombinant protein migrates as an approximately 21 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% gly, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

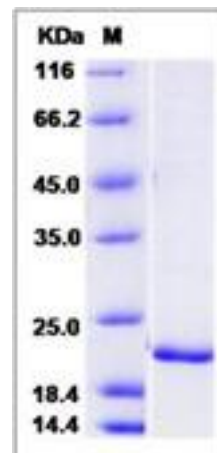
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

RHEB is a recently discovered member of the Ras superfamily that may be involved in neural plasticity. This function is novel and not typically associated with the Ras proteins. RHEB gene is a member of the small GTPase superfamily and encodes a lipid-anchored, cell membrane protein with five repeats of the RAS-related GTP-binding region. RHEB is vital in regulation of growth and cell cycle progression due to its role in the insulin / TOR / S6K signaling pathway. The protein has GTPase activity and shuttles between a GDP-bound form and a GTP-bound form, and farnesylation of RHEB is required for this activity. Three pseudogenes have been mapped, two on chromosome 10 and one on chromosome 22.

References

- 1.Karbowiczek, *et al.* (2004) Regulation of B-Raf kinase activity by tuberin and Rheb is mammalian target of rapamycin (mTOR)-independent. *J Biol Chem.* 279(29):29930-7.
- 2.Long, *et al.* (2005) Rheb binds and regulates the mTOR kinase. *Curr Biol.* 15(8):702-13.
- 3.Mizuki N, *et al.* (1996) Isolation of cDNA and genomic clones of a human Ras-related GTP-binding protein gene and its chromosomal localization to the long arm of chromosome 7, 7q36. *Genomics.* 34(1):114-8.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>