



# Recombinant Protein Technical Manual

## Recombinant Human RHEB Protein (His Tag)

RPES1442

### Product Data:

**Product SKU:** RPES1442

**Size:** 50µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** Q15382

### Protein Information:

**Molecular Mass:** 22.4 kDa

**AP Molecular Mass:** 21 kDa

**Tag:** N-His

**Bio-activity:**

**Purity:** > 85 % as determined by reducing SDS-PAGE.

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

**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 20mM Tris, 500mM NaCl, 10% gly, pH 7.4

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

**Application:**

**Synonyms:** GTP-Binding Protein Rheb; Ras Homolog Enriched in Brain; RHEB; RHEB2

## Immunogen Information:

**Sequence:** Met 1-Cys181

## Background:

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.