



Recombinant Protein Technical Manual

Recombinant Human RHEB Protein (GST Tag)

RPES0127

Product Data:

Product SKU: RPES0127

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: Q15382

Protein Information:

Molecular Mass: 20.4 kDa

AP Molecular Mass: 45 kDa

Tag: N-GST

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

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

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 µm filtered solution of 20mM Tris, 10mM GSH, pH 8.0.

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: Met1-Met184

Background:

GTP-Binding Protein Rheb (RHEB) 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. Highest levels of RHEB can be found in the skeletal and cardiac muscle, and it is vital in the regulation of growth and cell cycle progression due to its role in the Insulin/TOR/S6K signaling pathway. RHEB stimulates the phosphorylation of S6K1 and EIF4EBP1 through activation of mTORC1 signaling, and it activates the protein kinase activity of mTORC1. RHEB has GTPase activity and shuttles between a GDP-bound form and a GTP-bound form, farnesylation of the protein is required for this activity.