

## 32-4651: Recombinant Human Ras Homolog Enriched in Brain

Alternative Name : RHEB2,GTP-binding protein Rheb,MGC111559,Ras homolog enriched in brain,RHEB.

## **Description**

Source : Escherichia Coli. RHEB Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 197 amino acids (1-181 amino acids) and having a molecular mass of 21.7 kDa.The RHEB is fused to T7-tag at N-terminus (16 a.a.) and is purified by standard chromatography techniques. RHEB is part of the Ras & GTPase superfamily that was originally identified as an immediate-early gene in brain but is also widely expressed in other tissues. RHEB encodes a lipid-anchored, cell membrane protein with five repeats of the RAS-related GTP-binding region. RHEB is necessary in regulation of growth and cell cycle progression due to its role in the insulin/TOR/S6K signaling pathway. RHEB has GTPase activity and shuttles between a GDP-bound form and a GTP-bound form, and farnesylation of the protein is required for this activity. RHEB induces oncogenic transformation. RHEB overexpression accelerates lymphomagenesis and is associated with prostate cancer. RHEB can cytopathologically distinguish between fibroadenoma from malignant breast carcinomas which is considered as a secondary diagnostic tool. RHEB has a central role in the regulation of the Ras/B-Raf/C-Raf/MEK signaling network.

## **Product Info**

Amount :	50 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	The RHEB protein solution (1mg/ml) contains 20mM Tris-HCl pH-8, 1mM DTT and 10% glycerol.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks.Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.
Amino Acid :	MASMTGGQQM GRGSASMPQS KSRKIAILGY RSVGKSSLTI QFVEGQFVDS YDPTIENTFT KLITVNGQEY HLQLVDTAGQ DEYSIFPQTY SIDINGYILV YSVTSIKSFE VIKVIHGKLL DMVGKVQIPI MLVGNKKDLH MERVISYEEG KALAESWNAA FLESSAKENQ TAVDVFRRII LEAEKMDGAA SQGKSSC.

