

## HUMAN RHOB PROTEIN, HFC TAG

**Cat.#:** 11901

**Product Name:** Human RHOB Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** ARH6;ARHB;MST081;MSTP081;RHOH6

**Target:** RHOB

**UNIPROT ID:** P62745

**Description:** Recombinant Human RHOB Protein with C-terminal human Fc tag

**Background:** Mediates apoptosis in neoplastically transformed cells after DNA damage. Not essential for development but affects cell adhesion and growth factor signaling in transformed cells. Plays a negative role in tumorigenesis as deletion causes tumor formation. Involved in intracellular protein trafficking of a number of proteins. Targets PKN1 to endosomes and is involved in trafficking of the EGF receptor from late endosomes to lysosomes. Also required for stability and nuclear trafficking of AKT1/AKT which promotes endothelial cell survival during vascular development. Serves as a microtubule-dependent signal that is required for the myosin contractile ring formation during cell cycle cytokinesis. Required for genotoxic stress-induced cell death in breast cancer cells.[UniProtKB/Swiss-Prot Function]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 47.4 kDa after removal of the signal peptide. The apparent molecular mass of RHOB-hFc is approximately 35–55 kDa due to glycosylation.

**Molecular Characterization:** RHOB(Met1-Gly188) hFc(Glu99-Ala330)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.



Figure 1. Human RHOB Protein, hFc Tag on SDS-PAGE under reducing condition.