Recombinant RALA protein (His tag)

Catalog Number	537510
Species	Human
Expression System	E. coli
Accession	P11233
Molecular Weight	Predictes a molecular mass of 24.89 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	1-203
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-203 aa (P11233) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Ras-related protein Ral-A (EC 3.6.5.2) fragment (amino acids 1-203) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment encompasses the full-length protein's functional domains, offering a stable tool to investigate Ral-A's roles in GTP sensing, exocytosis, mitochondrial fission, and cellular signaling pathways. Ras-related protein Ral-A is a multifunctional GTPase in humans that regulates diverse cellular processes, including gene expression, cell migration, proliferation, oncogenic transformation, and membrane trafficking. It acts as a GTP sensor for exocytosis of dense core vesicles and is part of the RALA-exocyst complex, which controls integrin-dependent membrane raft exocytosis and growth signaling. Ral-A also modulates LPAR1 signaling by competing with GRK2 for receptor binding, influences anchorage-independent proliferation in transformed cells, and stabilizes intracellular bridges during mitosis. Additionally, it recruits RALBP1 to mitochondria in mitosis to promote DNM1L phosphorylation and mitochondrial fission. The protein localizes to the cell membrane (lipid-anchored on the cytoplasmic side), cleavage furrow, midbody, and mitochondrion, with dynamic redistribution in response to ligands like LPA, highlighting its importance in cellular dynamics and disease research.