





# Recombinant Human Ras-related protein Rab-5A (RAB5A)

| Product Code      | CSB-EP019213HU  |
|-------------------|---|
| Relevance         | The small GTPases Rab are key regulators of intracellular mbrane trafficking, from the formation of transport vesicles to their fusion with mbranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to mbranes different sets of downstream effectors directly responsible for vesicle formation, movent, tethering and fusion. RAB5A is required for the fusion of plasma mbranes and early endosomes. Contributes to the regulation of filopodia extension. |
| Abbreviation      | Recombinant Human RAB5A protein   |
| Storage           | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.   |
| Uniprot No.       | P20339  |
| Product Type      | Recombinant Protein   |
| Immunogen Species | Homo sapiens (Human)  |
| Purity            | Greater than 90% as determined by SDS-PAGE.   |
| Sequence          | MASRGATRPNGPNTGNKICQFKLVLLGESAVGKSSLVLRFVKGQFHEFQESTI<br>GAAFLTQTVCLDDTTVKFEIWDTAGQERYHSLAPMYYRGAQAAIVVYDITNEE<br>SFARAKNWVKELQRQASPNIVIALSGNKADLANKRAVDFQEAQSYADDNSLLF<br>METSAKTSMNVNEIFMAIAKKLPKNEPQNPGANSARGRGVDLTEPTQPTRNQ<br>CCSN   |
| Research Area     | Developmental Biology   |
| Source            | E.coli  |
| Target Names      | RAB5A   |
| Expression Region | 1-215aa   |
| Notes             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.   |
| Tag Info          | N-terminal 6xHis-SUMO-tagged  |
| Mol. Weight       | 39.7kDa   |
| Protein Length    | Full Length   |
| Image             |   |



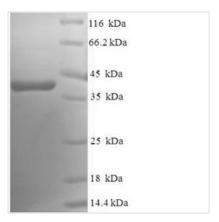
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(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

### Description

The formation of the recombinant plasmid by incorporating the gene encoding the Human RAB5A protein (1-215aa) into a plasmid vector initiates the generation of the recombinant Human RAB5A protein. Transforming the recombinant plasmid into e.coli cells and then selecting the positive e.coli cells based on their ability to survive in the presence of a specific antibiotic. The positive e.coli cells are cultured under conditions that stimulate the expression of the gene of interest. The protein is equipped with a N-terminal 6xHis-SUMO tag. After expression, affinity purification is employed to isolate and purify the recombinant Human RAB5A protein from the cell lysate. Denaturing SDS-PAGE is utilized to resolve the resulting recombinant Human RAB5A protein, revealing a purity level exceeding 90%.

#### Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

## Shelf Life

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