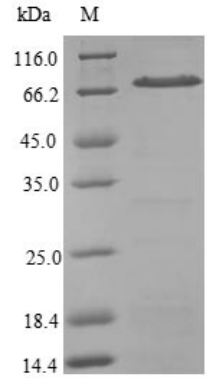
Recombinant Human Signal recognition particle subunit SRP54 (SRP54)

Product Code	CSB-EP022675HU
Abbreviation	Recombinant Human SRP54 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.	P61011
Storage Buffer	Tris-based buffer,50% glycerol
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MVLADLGRKITSALRSLSNATIINEEVLNAMLKEVCTALLEADVNIKLVKQLREN VKSAIDLEEMASGLNKRKMIQHAVFKELVKLVDPGVKAWTPTKGKQNVIMFVG LQGSGKTTTCSKLAYYYQRKGWKTCLICADTFRAGAFDQLKQNATKARIPFYG SYTEMDPVIIASEGVEKFKNENFEIIIVDTSGRHKQEDSLFEEMLQVANAIQPDNI VYVMDASIGQACEAQAKAFKDKVDVASVIVTKLDGHAKGGGALSAVAATKSPII FIGTGEHIDDFEPFKTQPFISKLLGMGDIEGLIDKVNELKLDDNEALIEKLKHGQF TLRDMYEQFQNIMKMGPFSQILGMIPGFGTDFMSKGNEQESMARLKKLMTIM DSMNDQELDSTDGAKVFSKQPGRIQRVARGSGVSTRDVQELLTQYTKFAQM VKKMGGIKGLFKGGDMSKNVSQSQMAKLNQQMAKMMDPRVLHHMGGMAGL QSMMRQFQQGAAGNMKGMMGFNNM
Research Area	Signal Transduction
Source	E.coli
Target Names	SRP54
Protein Names	Recommended name: Signal recognition particle 54 kDa protein Short name= SRP54
Expression Region	1-504aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-B2M-tagged
Mol. Weight	69.7 kDa
Protein Length	Full Length
Image	



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

Description

The region for expressing recombinant Human SRP54 contains amino acids 1-504. The expected molecular weight for the SRP54 protein is calculated to be 69.7 kDa. The SRP54 protein was expressed in e.coli. The SRP54 coding gene included the N-terminal 6xHis-B2M tag, which simplifies the detection and purification processes of the recombinant SRP54 protein in following stages of expression and purification.

The human signal recognition particle 54 kDa protein (SRP54) is a key component of the signal recognition particle (SRP), which is involved in the cotranslational targeting of secretory and membrane proteins to the endoplasmic reticulum (ER). SRP54 is a GTPase that recognizes the signal sequence of nascent polypeptide chains emerging from the ribosome. It forms a complex with the SRP RNA and additional SRP proteins, facilitating the targeting of the ribosome-nascent chain complex to the ER membrane. Upon successful targeting, SRP54 mediates the transfer of the signal peptide to the translocon, allowing the protein to be translocated into the ER for further processing and maturation. The role of SRP54 is crucial for proper protein trafficking and secretion in eukaryotic cells, and its dysfunction can lead to defects in protein localization and contribute to various cellular disorders. Research areas involving SRP54 include protein translocation, cellular trafficking, and the molecular mechanisms underlying protein targeting to the ER.

Shelf Life

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