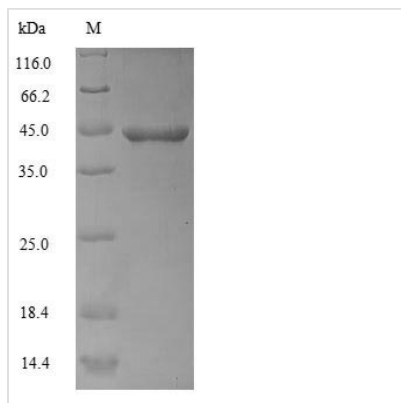




# Recombinant Human Actin, alpha skeletal muscle (ACTA1)

<b>Product Code</b>	CSB-EP001205HU
<b>Relevance</b>	Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.
<b>Abbreviation</b>	Recombinant Human ACTA1 protein
<b>Storage</b>	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.
<b>Uniprot No.</b>	P68133
<b>Alias</b>	Alpha-actin-1
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	DEDETTALVCDNGSGLVKAGFAGDDAPRAVFPSIVGRPRHQGVVMVGMGQKD SYVGDEAQSQRGILTLKYPIEHGIITNWDDMEKIWHHTFYNELRVAPEEHPTLL TEAPLNPKANREKMTQIMFETFNVPAMYVAIQAVLSLYASGRRTTGIVLDSGDGV THNVPIYEGYALPHAIMRLDLAGRDLTDYLMKILTERGYSFVTTAEREIVRDIKE KLCYVALDFENEMATAASSSSLEKSYELPDGQVITIGNERFRCPETLFQPSFIG MESAGIHETTYNSIMKCDIDIRKDLYANNVMSGGTTMYPGIADRMQKEITALAP STMKIKIIPPERKYSVWIGGSILASLSTFQQMWITKQEYDEAGPSIVHRKCF
<b>Research Area</b>	Signal Transduction
<b>Source</b>	E.coli
<b>Target Names</b>	ACTA1
<b>Expression Region</b>	3-377aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 6xHis-tagged
<b>Mol. Weight</b>	45.8kDa
<b>Protein Length</b>	Full Length of Mature Protein
<b>Image</b>	



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

## Description

The expression region of this recombinant Human ACTA1 covers amino acids 3-377. This ACTA1 protein is expected to have a theoretical molecular weight of 45.8 kDa. Expression of this ACTA1 protein is conducted in e.coli. The N-terminal 6xHis tag was fused into the coding gene segment of ACTA1, making it easier to detect and purify the ACTA1 recombinant protein in the later stages of expression and purification.

Actin, alpha skeletal muscle (ACTA1) is a widely expressed protein in muscle tissue, primarily involved in the study of muscle biology. In this field, ACTA1 plays a crucial role as it constitutes an essential component of the cell skeleton in muscle cells. Researchers focus on understanding the function of ACTA1 in muscle contraction and movement processes, as well as its role in maintaining muscle structure and stability. One of the most significant research directions is exploring the relationship between ACTA1 and muscle diseases, such as muscular dystrophy. Scientists also investigate the mechanisms of ACTA1 involvement in muscle regeneration and repair, which holds important implications for treating muscle injuries and diseases.

## 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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