

Recombinant Human ACTA1 protein, GST-tagged

Cat. No. ACTA1-125H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human ACTA1(1 a.a. - 377 a.a.) fused with GST tag at N-terminal was expressed in Wheat Germ.
Species	Human
Source	Wheat Germ
ProteinLength	1-377 a.a.
Description	The product encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile apparatus, while beta and gamma actins are involved in the regulation of cell motility. This actin is an alpha actin that is found in skeletal muscle. Mutations in this gene cause nemaline myopathy type 3, congenital myopathy with excess of thin myofilaments, congenital myopathy with cores, and congenital myopathy with fiber-type disproportion, diseases that lead to muscle fiber defects.
Form	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Molecular Mass	68.5 kDa
AA Sequence	MCDEDETTALVCDNGSGLVKAGFAGDDAPRAVFPISIVGRPRHQGVMMGMGQKDS YVGDEAQSKRGILTLYPIEH GIITNWDDMEKIWHHTFYNELRVAPEEHPTLLTEAPL

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

NPKANREKMTQIMFETFNVPAMYVAIQAVLSLYASGRT TGIVLDSDGDGVTHNVPIYE
 GYALPHAIMRLDLAGRDLTDYLMKILTERGYSFVTTAEREIVRDIKEKLCYVALDF EN
 EMATAASSSSLEKSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGIHETTYNSIM
 KCDIDIRKDLYANNV MSGGTTMYPGIADRMQKEITALAPSTMKIKIIPPERKYSVWI
 GGSILASLSTFQQMWITKQEYDEAGPSIVHRK CF

Applications Enzyme-linked Immunoabsorbent Assay; Western Blot (Recombinant protein);
 Antibody Production; Protein Array

Notes Best use within three months from the date of receipt of this protein.

Storage Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name ACTA1 actin, alpha 1, skeletal muscle [Homo sapiens]

Official Symbol ACTA1

Synonyms ACTA1; actin, alpha 1, skeletal muscle; ACTA; actin, alpha skeletal muscle; alpha-actin-1; alpha skeletal muscle actin; ASMA; CFTD; MPFD; NEM1; NEM2; NEM3; CFTD1; CFTDM;

Gene ID 58

mRNA Refseq NM_001100

Protein Refseq NP_001091

MIM 102610

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UniProt ID	P68133
Chromosome Location	1q42.13
Pathway	Caspase cascade in apoptosis, organism-specific biosystem; Hypothetical Network for Drug Addiction, organism-specific biosystem; Myometrial Relaxation and Contraction Pathways, organism-specific biosystem; RhoA signaling pathway, organism-specific biosystem; Signaling events mediated by focal adhesion kinase, organism-specific biosystem; Striated Muscle Contraction, organism-specific biosystem;
Function	ADP binding; ATP binding; myosin binding; nucleotide binding; protein binding; structural constituent of cytoskeleton;

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