Datasheet for ABIN7562855

Myogenin Protein (AA 1-224) (His tag)

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Overview

Quantity:	1 mg
Target:	Myogenin (MYOG)
Protein Characteristics:	AA 1-224
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Myogenin protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Myog Protein expressed in mammalian cells.
Sequence:	MELYETSPYF YQEPHFYDGE NYLPVHLQGF EPPGYERTEL SLSPEARGPL EEKGLGTPEH CPGQCLPWAC KVCKRKSVSV DRRRAATLRE KRRLKKVNEA FEALKRSTLL NPNQRLPKVE ILRSAIQYIE RLQALLSSLN QEERDLRYRG GGGPQPMVPS ECNSHSASCS PEWGNALEFG PNPGDHLLAA DPTDAHNLHS LTSIVDSITV EDMSVAFPDE TMPN **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts.

Product Details

	• Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	Myogenin (MYOG)
Alternative Name:	Myog (MYOG Products)
Background:	Myogenin (MYOD1-related protein),FUNCTION: Acts as a transcriptional activator that promotes transcription of muscle-specific target genes and plays a role in muscle differentiation, cell cycle exit and muscle atrophy. Essential for the development of functional embryonic skeletal fiber muscle differentiation. However is dispensable for postnatal skeletal muscle growth, phosphorylation by CAMK2G inhibits its transcriptional activity in respons to muscle activity. Required for the recruitment of the FACT complex to muscle-specific promoter regions, thus promoting gene expression initiation. During terminal myoblast differentiation, plays a role as a strong activator of transcription at loci with an open chromatin structure previously initiated by MYOD1. Together with MYF5 and MYOD1, co-occupies muscle-specific gene promoter core regions during myogenesis. Cooperates also with myocyte-specific enhancer factor MEF2D and BRG1-dependent recruitment of SWI/SNF chromatin-remodeling enzymes to alter chromatin structure at myogenic late gene promoters. Facilitates cell cycle exit during terminal muscle differentiation through the up-regulation of miR-20a expression, which in turn represses genes involved in cell cycle progression. Binds to the E-box containing (E1) promoter region of the miR-20a gene. Plays also a role in preventing reversal of muscle cell

Target Details

	differentiation. Contributes to the atrophy-related gene expression in adult denervated muscles. Induces fibroblasts to differentiate into myoblasts. {ECO:0000269|PubMed:15706034, ECO:0000269|PubMed:16407395, ECO:0000269|PubMed:16424906, ECO:0000269|PubMed:16437161, ECO:0000269|PubMed:21465538, ECO:0000269|PubMed:21798092, ECO:0000269|PubMed:22235349, ECO:0000269|PubMed:22847234, ECO:0000269|PubMed:23364797, ECO:0000269|PubMed:8393145, ECO:0000269|PubMed:8393146}.
Molecular Weight:	25.2 kDa
UniProt:	P12979
Pathways:	Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months