

Product datasheet

Recombinant Human MEF2D protein ab152520

1 Image

Description

Product name	Recombinant Human MEF2D protein
Expression system	Wheat germ
Accession	Q14814-4
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	<p>MGRKKIQIRITDERNRRVFTTKRKFGLMKKAYELSVLCDC EIALIIFNH SNKLFQYASTDMDKVLLKYTEYNEPHESRTNADIIE¹TLRKK GFNGCDSPE PDGEDSLEQSPILLEDKYRRASEELDGLFRRYGSTVPAPN FAMPVTVPVSN QSSLQFSNPSGSLVTPSLVTSSLTDPRLLSPPQPALQRN SVSPGLPQRPA SAGAMLGGDLNSANGACPSVGNQYVSARASPGLLPVA NGNSLNKVIPAK SPPPP¹THSTQLGAPSRKPDLRVITSQAGKGLMHHLNNAQ RLGVSQSTHSL TTPVVS¹VATPSLLSQGLPFSSMPTAYNTDYQLTSAELSSL PAFSSPGGLS LGNVTAWQQPQQPQQPQQPQQPPQQPPQPPQPPQPPQ PQQPQQPPQQQSHL VPVLSNLIPGSPLPHVGAALTVTTHPHISIKSEPVSPSRE RSPAPPPPA VFPAARPEPGDGLSSPAGGSYETGDRDDGRGDFGPTLG LLRPAPEPEAEG SAVKRMRLDTWTLK</p>
Predicted molecular weight	82 kDa including tags
Amino acids	1 to 514
Tags	GST tag N-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab152520** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications

- ELISA
- Western blot
- SDS-PAGE

Form Liquid

Additional notes

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.
pH: 8.00
Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

Function Transcriptional activator which binds specifically to the MEF2 element, 5'-YTA[AT](4)TAR-3', found in numerous muscle-specific, growth factor- and stress-induced genes. Mediates cellular functions not only in skeletal and cardiac muscle development, but also in neuronal differentiation and survival. Plays diverse roles in the control of cell growth, survival and apoptosis via p38 MAPK signaling in muscle-specific and/or growth factor-related transcription. Plays a critical role in the regulation of neuronal apoptosis.

Sequence similarities Belongs to the MEF2 family.
Contains 1 MADS-box domain.
Contains 1 Mef2-type DNA-binding domain.

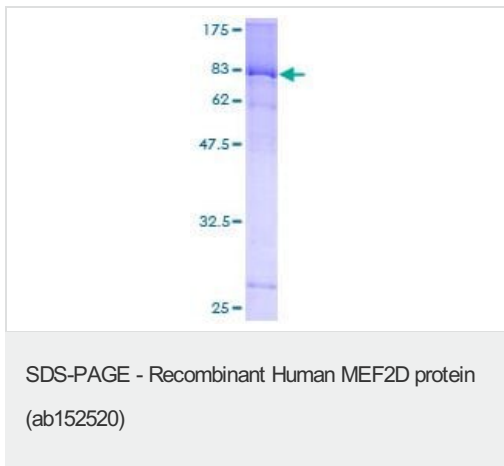
Developmental stage Present in myotubes and also in undifferentiated myoblasts.

Domain The beta domain, missing in a number of isoforms, is required for enhancement of transcriptional activity.

Post-translational modifications Phosphorylated on Ser-444 by CDK5 is required for Lys-439 sumoylation and inhibits transcriptional activity. In neurons, enhanced CDK5 activity induced by neurotoxins promotes caspase 3-mediated cleavage leading to neuron apoptosis. Phosphorylation on Ser-180 can be enhanced by EGF.
Acetylated on Lys-439 by CREBBP. Deacetylated by SIRT1.
Sumoylated on Lys-439 by SUMO2 but not SUMO1; which inhibits transcriptional activity and myogenic activity. Desumoylated by SENP3.
Proteolytically cleaved in cerebellar granule neurons on several sites by caspase 7 following neurotoxicity. Preferentially cleaves the CDK5-mediated hyperphosphorylated form which leads to neuron apoptosis and transcriptional inactivation.

Cellular localization Nucleus. Translocated by HDAC4 to nuclear dots.

Images



12.5% SDS-PAGE analysis of ab152520 stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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