Recombinant MEF2D protein (His tag)

Catalog Number	540313
Species	Human
Expression System	E. coli
Accession	Q14814
Molecular Weight	Predictes a molecular mass of 12.51 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	1-91
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-91 aa (Q14814) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Myocyte-specific enhancer factor 2D (MEF2D) fragment (amino acids 1-91) is a high-purity protein designed for investigating the MADS-box domain's role in transcriptional regulation. This fragment serves as an essential tool for studying DNA binding, muscle development, neuronal differentiation, and stress response pathways in research applications. Myocyte-specific enhancer factor 2D (MEF2D), encoded by the MEF2D gene in Homo sapiens, functions as a transcriptional activator that binds to the MEF2 element (5'-YTA[AT](4)TAR-3') present in numerous muscle-specific, growth factor-induced, and stress-responsive genes. It plays critical roles in skeletal and cardiac muscle development, neuronal differentiation, and cell survival, mediated through p38 MAPK signaling. MEF2D is also involved in regulating neuronal apoptosis and is primarily localized in the nucleus, where it can be translocated by HDAC4 to nuclear dots. The provided fragment (1-91) encompasses the MADS-box domain (residues 3-57), enabling focused studies on domain-specific functions such as DNA binding and transcriptional activation.