Recombinant MBNL2 protein (His tag)

Catalog Number	542864
Synonyms	Muscleblind-like protein 1; Muscleblind-like protein-like; Muscleblind-like protein-like 39
Species	Human
Expression System	E. coli
Accession	Q5VZF2
Molecular Weight	Predictes a molecular mass of 12.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	1-99
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-99 aa (Q5VZF2) 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	Introducing the recombinant Muscleblind-like protein 2 (MBNL2) fragment (residues 1-99), a stable and soluble unit derived from human MBNL2. This fragment is expertly designed for structural and biochemical studies, offering researchers a reliable tool to investigate the splicing regulatory mechanisms of this key RNA-binding protein. Muscleblind-like protein 2 (MBNL2) is a crucial RNA-binding protein in Homo sapiens that mediates pre-mRNA alternative splicing regulation, acting as either an activator or repressor on specific targets. It binds to the 5'-ACACCC-3' core sequence and plays roles in antagonizing CELF protein splicing activity, sequestering CUG triplet repeat expansions in myotonic dystrophy, and regulating genes such as cardiac troponin-T and insulin receptor. MBNL2 is primarily localized in the nucleus with some cytoplasmic presence near adhesion plaques, and its mislocalization to nuclear foci in myotonic dystrophy patients highlights its pathophysiological significance. This recombinant fragment (1-99) provides a focused model for exploring these functions without contained domains, enabling detailed mechanistic studies.