Data Sheet (Cat.No.TMPY-03446)

TargetMol

ENO3 Protein, Human, Recombinant (His)

General Information

Synonyms: enolase 3 (beta, muscle);GSD13;MSE;enolase 3 (β, muscle)

Protein Construction: 7-432 aa

Species: Human

Expression Host: E. coli

Accession: P13929

Molecular Weight: 50.1 kDa (predicted)

AA Sequence: FAREILDSRGNPTVEVDLHTAKGRFRAAVPSGASTGIYEALELRDGDKGRYLGKGVLKAVENINNTLGPALLQ KKLSVVDQEKVDKFMIELDGTENKSKFGANAILGVSLAVCKAGAAEKGVPLYRHIADLAGNPDLILPVPAFNVI NGGSHAGNKLAMQEFMILPVGASSFKEAMRIGAEVYHHLKGVIKAKYGKDATNVGDEGGFAPNILENNEAL ELLKTAIQAAGYPDKVVIGMDVAASEFYRNGKYDLDFKSPDDPARHITGEKLGELYKSFIKNYPVVSIEDPFDQ DDWATWTSFLSGVNIQIVGDDLTVTNPKRIAQAVEKKACNCLLLKVNQIGSVTESIQACKLAQSNGWGVMVS HRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDKAIFAGRKFRNPK

QC Testing

Biological Activity: Activity is not tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

Purity: > 90% as determined by SDS-PAGE

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: Tris/PBS-based buffer

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

ENO3 is one of the three enolase isoenzymes found in mammals. As a homodimer, ENO3 is found in skeletal muscle cells in the adult. A switch from alpha enolase to beta enolase occurs in muscle tissue during development in rodents. Mutations in ENO3 gene can be associated with metabolic myopathies that may result from decreased stability of the enzyme. Two transcripts have been identified for ENO3 gene that differ only in their 5' UTR. ENO3 may play a role in muscle development and regeneration. It appears to have a function in striated muscle development and regeneration.

Reference

Peshavaria M,et al.(1989) Structure of human muscle (beta) enolase mRNA and protein deduced from a genomic clone. Nucleic Acids Res. 17(21):8862.

Calì L,et al.(1990) Nucleotide sequence of a cDNA encoding the human muscle-specific enolase (MSE). Nucleic Acids Res. 18(7):1893.

Peshavaria M,et al.(1991) Molecular structure of the human muscle-specific enolase gene (ENO3). Biochem J. 275 (2):427-33.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481