abcam

Product datasheet

Recombinant human ENO3 protein ab113127

1 Image

Description

Product name Recombinant human ENO3 protein

Biological activity Specific activity is > 5,000pmol/min/µg, and was obtained by measuring the decrease of NAD in

absorbance at 340nm resulting from NADH at pH 6.5 at 37°C.

Purity > 95 % SDS-PAGE.

ab113127 was purified using conventional chromatography.

Expression system Escherichia coli

Accession P13929

Protein length Full length protein

Animal free No.

Nature Recombinant

Species Human

Sequence MGSSHHHHHHSSGLVPRGSHMAMQKIFAREILDSRGNP

TVEVDLHTAKGR

FRAAVPSGASTGIYEALELRDGDKGRYLGKGVLKAVENIN

STLGPALLQK

KLSVADQEKVDKFMIELDGTENKSKFGANAILGVSLAVCK

AGAAEKGVPL

YRHIADLAGNPDLILPVPAFNVINGGSHAGNKLAMQEFMIL

PVGASSFKE

AMRIGAEVYHHLKGVIKAKYGKDATNVGDEGGFAPNILEN

NEALELLKTA

IQAAGYPDKVVIGMDVAASEFYRNGKYDLDFKSPDDPAR

HITGEKLGELY

KSFIKNYPVVSIEDPFDQDDWATWTSFLSGVNIQIVGDDLT

VTNPKRIAQ

AVEKKACNCLLLKVNQIGSVTESIQACKLAQSNGWGVMV

SHRSGETEDTF

IADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEALGDKA

IFAGRKFRN PKAK

Predicted molecular weight 49 kDa including tags

Amino acids 1 to 434

Tags His tag N-Terminus

I

Specifications

Our Abpromise guarantee covers the use of ab113127 in the following tested applications.

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

Applications SDS-PAGE

Mass Spectrometry

Mass spectrometry MALDI-TOF

Form Liquid

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.02% DTT, 0.32% Tris HCl, 20% Glycerol (glycerin, glycerine), 0.58% Sodium

chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function Appears to have a function in striated muscle development and regeneration.

Tissue specificityThe alpha/alpha homodimer is expressed in embryo and in most adult tissues. The alpha/beta

heterodimer and the beta/beta homodimer are found in striated muscle, and the alpha/gamma

heterodimer and the gamma/gamma homodimer in neurons.

Pathway Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 4/5.

Involvement in diseaseDefects in ENO3 are the cause of glycogen storage disease type 13 (GSD13) [MIM:612932]. A

metabolic disorder that results in exercise-induced myalgias, generalized muscle weakness and fatigability. It is characterized by increased serum creatine kinase and decreased enolase 3 activity. Dramatically reduced protein levels with focal sarcoplasmic accumulation of glycogen-

beta particles are detected on ultrastructural analysis.

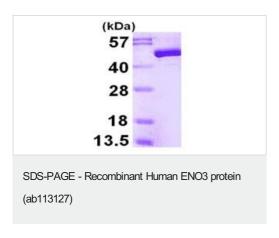
Sequence similarities Belongs to the enclase family.

Developmental stageDuring ontogenesis, there is a transition from the alpha/alpha homodimer to the alpha/beta

heterodimer in striated muscle cells, and to the alpha/gamma heterodimer in nerve cells.

Cellular localization Cytoplasm. Localized to the Z line. Some colocalization with CKM at M-band.

Images



15% SDS-PAGE analysis of ENO3 protein (ab113127; 3 μg).

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- · We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors