

Recombinant human Enolase 1/ENO1 protein

Catalog Number: ATGP0404

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-434aa

UniProt No.

P06733

NCBI Accession No.

NP_001419.1

Alternative Names

Alpha-enolase, 2-phospho-D-glycerate hydro-lyase, C-myc promoter-binding protein, Enolase 1, MBP-1, MPB-1, Non-neural enolase, NNE, Phosphopyruvate hydratase, PPH, Plasminogen-binding protein, ENO1L1, MBPB1, MPB1, ENO1-IT1, ENO1 intronic transcript 1

PRODUCT SPECIFICATION

Molecular Weight

47.1 kDa (434aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 1mM MgSO₄, 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Specific activity is > 20,000pmol/min/ug, and was obtained by measuring the decrease of NAD in absorbance at 340nm resulting from NADH at pH 6.5 at 37C.

Tag

Non-Tagged

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

Alpha-enolase, also known as Enolase 1, is one of three enolase isoenzymes and a glycolytic enzyme expressed in most tissues. This protein plays a key role in anaerobic metabolism under hypoxic conditions and may act as a cell surface plasminogen receptor during tissue invasion. Abnormal expression of alpha-enolase is associated with tumor progression in some cases of breast and lung cancer. It also has been identified as an autoantigen associated with Hashimoto's encephalopathy and severe asthma. Recombinant human alpha-enolase was expressed in *E. coli* and purified by using conventional chromatography.

Amino acid Sequence

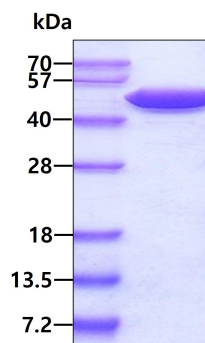
MSILKIHARE IFDSRGNPTV EVDLFTSKGL FRAAVPSGAS TGIYEALRLR DNDKTRYMGK GVSKAVEHIN KTIAPALVSK
KLNVTQEKI DKLMIEMDGT ENKSKFGANA ILGVSLAVCK AGAVEKGVPL YRHIADLAGN SEVILPVPF NVINGGSHAG
NKLAMQEFMI LPVGAANFRE AMRIGAEVYH NLKNVIKEYK GKDATNVGDE GGFAPNILEN KEGLELLKTA IGKAGYTDKV
VIGMDVAASE FFRSGKYDLD FKSPDDPSRY ISPDQLADLY KSFIKDYPVV SIEDPFDQDD WGAWQKFTAS AGIQVVGDDL
TVTNPKRIAK AVNEKSCNCL LLKVNQIGSV TESLQACKLA QANGWGMVMS HRSGETEDTF IADLVVGLCT GQIKTGAPCR
SERLAKYNQL LRIEEELGSK AKFAGRNFN PLAK

General References

Das R., et al. (2009) *Blood*. 113(22):5371-2.
ueno NT., et al. (2008) *Cancer Res*. 68(22):9302-10.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.