Recombinant mouse Enolase 1/ENO1 protein

Catalog Number: ATGP3691

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-434aa

UniProt No.
P17182

NCBI Accession No.
NP_075608

Alternative Names
2-phospho-D-glycerate hydro-lyase, Enolase 1, Non-neural enolase, NNE, c-Myc promoter binding protein

PRODUCT SPECIFICATION

Molecular Weight
49.5 kDa (457aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by absorbance at 280nm)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.5) containing 40% glycerol, 0.1M NaCl

Purity
> 90% by SDS-PAGE

Biological Activity
Specific activity is > 6,000pmol/min/ug, and is defined as the amount of enzyme that convert 1.0pmole of 2-phosphoglycerate to phosphoenolpyruvate per minute at pH 6.5 at 37C in a couple system with PK and LDH.

Tag
His-Tag

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.

BACKGROUND

Description
Eno1 also known as Alpha-Enolase, 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 Eno1 is associated with tumor

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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 mouse Eno1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

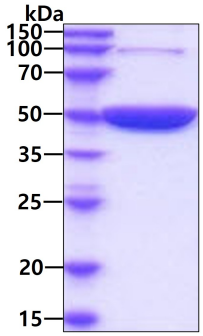
<MGSSHHHHHH SSGLVPRGSH MGS>MSILRIH AREIFDSRGN PTVEVDLYTA KGLFRAAVPS GASTGIYEAL ELRDNDKTRF MGKGVSQAVE HINKTIAPAL VSKKVNVVEQ EKIDKLMIEM DGTENKSKFG ANAILGVSLA VCKAGAVEKG VPLYRHIADL AGNPEVILPV PAFNVINGGS HAGNKLAMQE FMILPVGASS FREAMRIGAE VYHNLKNVIK EKYGKDATNV GDEGGFAPNI LENKEALELL KTAIAKAGYT DQVVIGMDVA ASEFYRSGKY DLDFKSPDDP SRYITPDQLA DLYKSFVQNY PVVSIEDPFD QDDWGAWQKF TASAGIQVVG DDLTVTNPKR IAKAASEKSC NCLLLKVNQI GSVTESLQAC KLAQSNGWGV MVSHRSGETE DTFIADLVVG LCTGQIKTGA PCRSERLAKY NQILRIEEEL GSKAKFAGRS FRNPLAK

General References

Plow EF., et al. (2009) Blood. 113(22):5371-2.
Bartholomeusz C., et al. (2008) Cancer Res. 68(22):9302-10.

DATA

SDS-PAGE



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