PRODUCT INFORMATION

Expression system E.coli

Domain 1-434aa

UniProt No. P17183

NCBI Accession No. NP_038537

Alternative Names 2-phospho-D-glycerate hydro-lyase, Neural enolase, Neuron-specific enolase

PRODUCT SPECIFICATION

Molecular Weight 49.7 kDa (457aa) confirmed by MALDI-TOF

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

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS-PAGE

Biological Activity

Specific activity is > 10,000pmol/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 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

Eno2, also known as Gamma enolase isoform1, is a glycolytic isoenzyme which is located in central and peripheral neurons and neuroendocrine cells. This enzyme is released into the CSF when neural tissue is injured. Neoplasms derived from neural or neuroendocrine tissue may release Eno2 into the blood. Eno2 is a useful



substance that has been detected in patients with certain tumors, namely: neuroblastoma, small cell lung cancer, medullary thyroid cancer, carcinoid tumors, pancreatic endocrine tumors, and melanoma. Recombinant mouse Eno2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSMSIEKIW AREILDSRGN PTVEVDLYTA KGLFRAAVPS GASTGIYEAL ELRDGDKQRY LGKGVLKAVD HINSRIAPAL ISSGISVVEQ EKLDNLMLEL DGTENKSKFG ANAILGVSLA VCKAGAAERD LPLYRHIAQL AGNSDLILPV PAFNVINGGS HAGNKLAMQE FMILPVGAES FRDAMRLGAE VYHTLKGVIK DKYGKDATNV GDEGGFAPNI LENSEALELV KEAIDKAGYT EKMVIGMDVA ASEFYRDGKY DLDFKSPADP SRYITGDQLG ALYQDFVRNY PVVSIEDPFD QDDWAAWSKF TANVGIQIVG DDLTVTNPKR IERAVEEKAC NCLLLKVNQI GSVTEAIQAC KLAQENGWGV MVSHRSGETE DTFIADLVVG LCTGQIKTGA PCRSERLAKY NQLMRIEEEL GDEARFAGHN FRNPSVL

General References

Hafner A., et al. (2013) Aging Cell 12(4):604-14. Ninomiya S., et al. (2013) Neurosci Res 75(2):121-9.

DATA





15% SDS-PAGE (3ug)

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