

Human Recombinant Neuron-Specific Enolase (NSE)

CATALOG #:	6362-100	100 µg
ALTERNATE NAMES:	Enolase 2 (gamma, neuronal), ENO2.	
SOURCE:	E.Coli	
PURITY:	> 95% by SDS - PAGE	
MOL. WEIGHT:	47 kDa (434 aa, 1-434 aa)	
ENDOTOXIN LEVEL:	< 1.0 EU per 1 µg of protein (determined by LAL method).	
FORMULATION:	1 mg/ml solution in 20 mM Tris-HCl (pH 7.5) containing 100 mM KCl and 5 mM MgSO ₄ .	

STORAGE CONDITIONS:

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

DESCRIPTION:

Neuron-specific enolase (NSE) 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 NSE into the blood. NSE 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. NSE shows neurotrophic and neuroprotective properties on a broad spectrum of central nervous system (CNS) neurons and binds in a calcium-dependent manner to cultured neocortical neurons promoting cell survival.

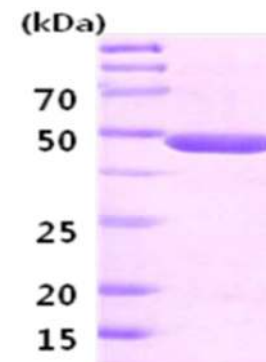
AMINO ACID SEQUENCE:

MSIEKIWARE ILDSRGNPTV EVDLYTAKGL FRAAVPSGAS TGIYEALRLR DGDQKRYLGLK
GVLKAVDHN STIAPALISS GLSVVEQEKL DNLMLELDGT ENKSKFGANA ILGVSLAVCK
AGAAERELPL YRHIAQLAGN SDLILPVPF NVINGGSHAG NKLAMQEFMI LPVGAESFRD
AMRLGAEVYH TLKGVKDKY GKDATNVGDE GGFAPNILEN SEALELVKEA IDKAGYTEKI
VIGMDVAASE FYRDGKYDLD FKSPTDPSRY ITGDQLGALY QDFVRDYPVV SIEDPFDQDD
WAAWSKFTAN VGIQIVGDDL TVTNPKRIER AVEEKACNCL LLKVNQIGSV TEAIQACKLA

QENGWGVMSV HRSGETEDTF IADLVVGLCT GQIKTGAPCR SERLAKYNQL
MRIEEEELGDE ARFAGHNFRN PSVL

BIOLOGICAL ACTIVITY:

Specific activity: > 8 units/ml. One unit will convert 1.0 µmole of 2-phosphoglycerate to phosphoenol pyruvate per minute at pH 7.5 at 25°C.



15% SDS-PAGE (3µg)
Human Recombinant NSE

RELATED PRODUCTS:

- Human Recombinant Alpha-Enolase (Cat. No. 6363-100)
- Human Recombinant Beta-Enolase (Cat. No. 6364-50)

FOR RESEARCH USE ONLY! Not to be used in humans.