

Rabbit anti-Human, rat NSE (Neuron specific enolase) Polyclonal Antibody | anti-ENO2 antibody

Anti-Neuron Specific Enolase (NSE)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA72800	Rabbit	Human, rat	Immunofluorescence, Western Blot

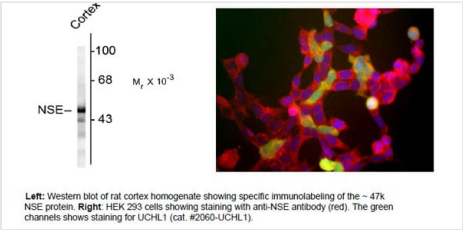
PRODUCT SYNONYMS

NSE (Neuron specific enolase); Polyclonal Antibody; Anti-Neuron Specific Enolase (NSE); anti-ENO2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, rat
Clonality	Polyclonal
Specificity	Specific for the ~47kDa NSE protein.
Purity/Purification	Neat Serum (Unpurified neat serum.)
Form/Format	Liquid.
Sequence Length	434
Applicable Applications for anti-ENO2 antibody	IF (Immunofluorescence), WB (Western Blot)
Antigen	Recombinant human NSE expressed in and purified from E. coli.
Immunogen Information	Recombinant human NSE expressed in and purified from E. coli
Immunogen Species	Human
Species Reactivity Note	The antibody has been directly tested for reactivity in human and rat. It is expected that it will work on other mammalian tissues.
Biological Significance	Neuron specific enolase (NSE) is an enzyme which catalyzes the conversion of 2-phosphoglycerate to phosphoenolpyruvate in the glycolytic pathway, and also the reverse reaction in gluconeogenesis. It is one of three mammalian enolases, which are also known as ENO1, ENO2, and ENO3 or alternately as enolase alpha, beta and gamma. The three enolases have different cell type specific expression patterns, so that antibodies to them are useful cell type specific markers.(MacAlesse et al., 1988). NSE corresponds to ENO2 or enolase gamma and is heavily expressed in neuronal cells. ENO1 is also known as enolase alpha and as non-neuronal enolase. The third enolase, ENO3 or enolase beta, is expressed in muscle cells. Since neurons require a great deal of energy, they are very rich in glycolytic enzymes such as GAPDH and NSE. Antibodies to this protein are therefore useful to identify neuronal cell bodies, developing neuronal lineage and neuroendocrine cells. Release of NSE from damaged neurons into CSF and blood has also been used as a biomarker of neuronal injury (2).
Preparation and Storage	Store at -20 degree C in undiluted aliquots; stable for at least 1 year. Avoid freeze/thaw cycles.

IMAGES



Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-ENO2 antibody	Rabbit polyclonal antibody
References	• MacAlesse SM, Dunbar B, Fothergill JE, Hinks LJ, Day IN (1988) Complete amino acid sequence of neurone-specific gamma isozyme of enolase (NSE) from human brain and comparison with the non-neuronal alpha form (NNE). Eur J Biochem. 178(2):413-17. • Begaz, T., Kyriacou, D. N., Segal, J. and Bazarian, J. J. Serum biochemical markers for post-concussion syndrome in patients with mild traumatic brain injury. J. Neurotrauma 23:1201-1210 (2006).

NCBI AND UNIPROT INFORMATION

NCBI GI #	5803011
NCBI GeneID	2026
NCBI Accession #	NP_001966.1
NCBI GenBank Nucleotide #	NM_001975.2
UniProt Accession #	P09104; Q96J33
Molecular Weight	47
NCBI Official Full Name	gamma-enolase
NCBI Official Synonym Full Names	enolase 2 (gamma, neuronal)
NCBI Official Symbol	ENO2
NCBI Official Synonym Symbols	NSE; HEL-S-279
NCBI Protein Information	gamma-enolase; neural enolase; neuron-specific enolase; neurone-specific enolase; neuron specific gamma enolase; 2-phospho-D-glycerate hydrolyase; 2-phospho-D-glycerate hydro-lyase; epididymis secretory protein Li 279
UniProt Protein Name	Gamma-enolase
UniProt Gene Name	ENO2
UniProt Synonym Gene Names	NSE
UniProt Entry Name	ENOG_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.