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Anti-NSE (Neuron specific enolase) Antibody

Our Anti-NSE (Neuron specific enolase) primary antibody from PhosphoSolutions is rabbit polyclonal.
Catalog # AN1498

Product Information

Application	WB, IHC, ICC
Primary Accession	P09104
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	47269

Additional Information

Gene ID	2026
Other Names	2 phospho D glycerate hydrolyase antibody, 2-phospho-D-glycerate hydro-lyase antibody, Eno 2 antibody, ENO2 antibody, ENOG antibody, ENOG_HUMAN antibody, Enolase 2 (gamma, neuronal) antibody, Enolase 2 antibody, Enolase 2 gamma neuronal antibody, Enolase2 antibody, Epididymis secretory protein Li 279 antibody, Gamma enolase antibody, Gamma-enolase antibody, HEL S 279 antibody, Neural enolase antibody, Neuron specific enolase antibody, Neuron specific gamma enolase antibody, Neuron-specific enolase antibody, neuronal enriched enolase antibody, Neurone specific enolase antibody, NSE antibody
Target/Specificity	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 a 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).
Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Format	Neat Serum
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions	Anti-NSE (Neuron specific enolase) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

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 a 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).