



Anti-Enolase monoclonal antibody, clone 2D2 (DMAB4001MH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Monoclonal Antibody to Human Neuron Specific Enolase (NSE)
Antigen Description	Gamma-enolase, also known as enolase 2 (ENO2) or neuron specific enolase (NSE), is an enzyme that in humans is encoded by the ENO2 gene. Gamma-enolase is a phosphopyruvate hydratase. Gamma-enolase is one of the three enolase isoenzymes found in mammals. This isoenzyme, a homodimer, is found in mature neurons and cells of neuronal origin. A switch from alpha enolase to gamma enolase occurs in neural tissue during development in rats and primates.
Specificity	Gamma-enolase. Specific for the gamma subunit without detectable cross-reactivity with the alpha or beta subunits.
Immunogen	Purified neuron-specific enolase from human brain
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human
Clone	2D2
Affinity Constant	$1 \times 10^{-8} - 1 \times 10^{-9}$
Purification	95% pure (SDS-PAGE). Protein G chromatography
Conjugate	Unconjugated
Applications	Suitable for use in ELISA and IHC (paraffin sections). Recommended dilution for IHC is 1:100-1:300. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not

necessarily be excluded. Recommended pairs in ELISA: Capture Detection M86416M
M86101M M86101M M86520M M86406M M86101M M86520M M86101M

Format	Purified, Liquid
Concentration	6.1mg/ml (OD280nm, E0.1% = 1.4)
Size	1 mg
Buffer	0.15M Sodium chloride
Preservative	0.1% Sodium Azide
Storage	Store at 2–8° C.

GENE INFORMATION

Gene Name	ENO2 enolase 2(gamma, neuronal) [Homo sapiens]
Official Symbol	ENO2
Synonyms	Neuron Specific Enolase; ENO2; EC 4.2.1.11; NSE; 2-phospho-D-glycerate hydro-lyase; Neuron-specific enolase; Neural enolase; neuron specific gamma enolase 2-phospho-D-glycerate hydrolyase;
Entrez Gene ID	2026
Protein Refseq	NP_001966
UniProt ID	P09104
Chromosome Location	12p13
Pathway	Gluconeogenesis; Glucose metabolism; Glycolysis; Glycolysis / Gluconeogenesis; Metabolic pathways; Metabolism of carbohydrates; RNA degradation
Function	lyase activity;magnesium ion binding; phosphopyruvate hydratase activity; proteinheterodimerization activity; protein homodimerization activity