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ENOG Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM1928b

Product Information

Application	WB, IHC-P, E
Primary Accession	P09104
Other Accession	NP_001966.1
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b,k
Clone Names	279CT17.1.1
Calculated MW	47269

Additional Information

Gene ID	2026
Other Names	Gamma-enolase, 2-phospho-D-glycerate hydro-lyase, Enolase 2, Neural enolase, Neuron-specific enolase, NSE, ENO2
Target/Specificity	This ENOG monoclonal antibody is generated from mouse immunized with ENOG recombinant protein.
Dilution	WB~~1:100~500 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ENOG Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ENO2 (HGNC:3353)
Function	Enolase that catalyzes the conversion of 2-phosphoglycerate to phosphoenolpyruvate in glycolysis and the reverse reaction in gluconeogenesis (By similarity). Has neurotrophic and neuroprotective properties on a broad spectrum of central nervous system (CNS) neurons.

	Binds, in a calcium-dependent manner, to cultured neocortical neurons and promotes cell survival (By similarity).
Cellular Location	Cytoplasm. Cell membrane. Note=Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form
Tissue Location	The alpha/alpha homodimer is expressed in embryo and in most adult tissues. The alpha/beta heterodimer and the beta/beta homodimer are found in striated muscle, and the alpha/gamma heterodimer and the gamma/gamma homodimer in neurons

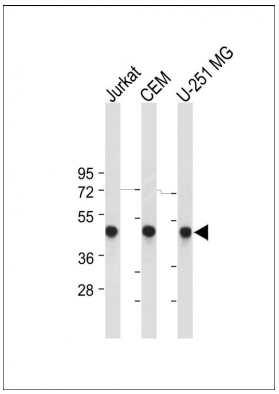
Background

This gene encodes 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.

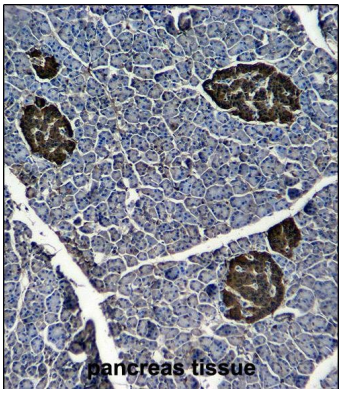
References

Martins-de-Souza, D., et al. J Psychiatr Res 44(14):989-991(2010)
Mukhtarova, S.N. Georgian Med News 181, 49-54 (2010) :
Planche, V., et al. Ann. Biol. Clin. (Paris) 68(2):239-242(2010)
Chaves, M.L., et al. J Neuroinflammation 7, 6 (2010) :
Wijeyaratne, S.M., et al. Eur J Vasc Endovasc Surg 38(3):262-266(2009)

Images



All lanes : Anti-ENOG at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: CEM whole cell lysate Lane 3: U-251 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 47 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



ENOG Antibody (Cat. #AM1928b)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of ENOG Antibody for immunohistochemistry. Clinical relevance has not been evaluated.