10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-NSE gamma Antibody

Mouse Monoclonal Antibody
Catalog # AH13198

Product Information

Application	IHC-P, IF, FC
Primary Accession	P09104
Other Accession	511915
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b
Clone Names	ENO2/1462
Calculated MW	47269

Additional Information

Gene ID	2026
Other Names	2-phospho-D-glycerate hydrolyase; ENO2; ENOG; Enolase 2 gamma neuronal; Enolase2; Gamma-enolase; Neural enolase; Neuron specific gamma enolase; Neuron-specific enolase; NSE
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (0.1-0.2ug/ml for 30 min at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-NSE gamma Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

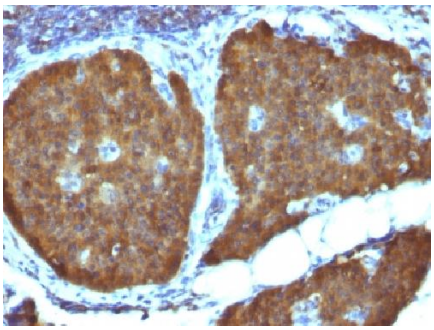
Name	ENO2
Function	Has neurotrophic and neuroprotective properties on a broad spectrum of central nervous system (CNS) neurons. Binds, in a calcium- dependent manner, to cultured neocortical neurons and promotes cell survival (By similarity).

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

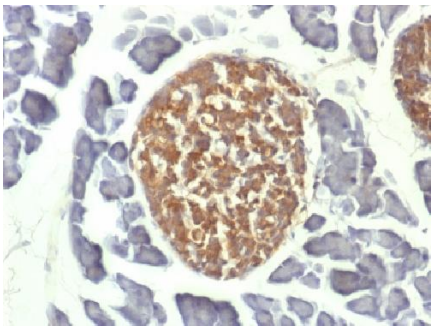
Background

Recognizes a protein of about 50kDa, which is identified as gamma-enolase. Three isoenzymes of enolases are identified, alpha, beta and gamma. Alpha-isoform is expressed in most tissues, whereas beta-form is expressed predominantly in muscle tissue whereas gamma-enolase is found only in nervous tissue. These isoforms exist as both homodimers and heterodimers, and they play a role in converting phosphoglyceric acid to phosphenolpyruvic acid in the glycolytic pathway. NSE-gamma is a useful marker to identify peripheral nerves and tumors of neuro-endocrine origins, such as pheochromocytomas. It it be usually employed in combination with other markers such as Synaptophysin, Chromogranin A, and Neurofilament.

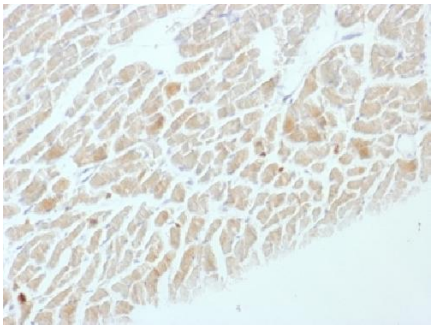
Images



Formalin-fixed, paraffin-embedded Human Pheochromocytoma stained with NSE gamma Monoclonal Antibody (ENO2/1462).



Formalin-fixed, paraffin-embedded Mouse Pancreas stained with NSE gamma Monoclonal Antibody (ENO2/1462).



Formalin-fixed, paraffin-embedded Rat Heart stained with NSE gamma Monoclonal Antibody (ENO2/1462).