

NSE (PT2281) mouse mAb

Catalog No :	YM4834
Reactivity :	Human;Mouse;Rat;
Applications :	IHC;WB;IF;ELISA
Target :	Enolase
Fields :	>>Glycolysis / Gluconeogenesis;>>Metabolic pathways;>>Carbon metabolism;>>Biosynthesis of amino acids;>>RNA degradation;>>HIF-1 signaling pathway
Gene Name :	ENO2
Protein Name :	Neuron-Specific Enolase(NSE)
Human Gene Id :	2026
Human Swiss Prot No :	P09104
Immunogen :	Synthesized peptide derived from human Neuron-Specific Enolase(NSE) AA range: 300-434
Specificity :	The antibody can specifically recognize human NSE protein. In western blotting of PC-12 cell lysate, the antibody can label a 47 kDa band corresponding to NSE.
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Mouse, Monoclonal/IgG1, kappa
Dilution :	IHC 1:200-1000. WB 1:500-2000. IF 1:100-500. ELISA 1:1000-5000
Purification :	Protein G
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	47kD

Observed Band : 47kD

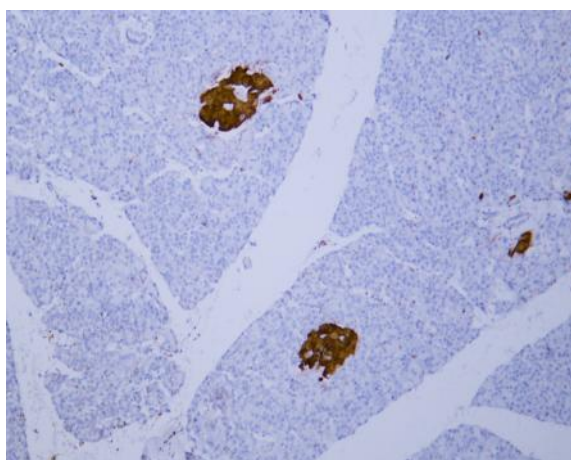
Background : Neuron-specific enolase (NSE) has $\alpha\beta\gamma$ three subunits, mainly distributed in central nerve, peripheral nerve, neuroendocrine cells and tumor cells, can be used in the auxiliary diagnosis of neuroendocrine tumors. Some non neuroendocrine cells also express NSE, such as normal smooth muscle, myoepithelial cells, renal tubular cells, lymphocytes and so on. It should be combined with other antibodies in the study of neuroendocrine tumors.

Function : catalytic activity:2-phospho-D-glycerate = phosphoenolpyruvate + H₂O.,cofactor:Magnesium. Required for catalysis and for stabilizing the dimer.,developmental stage:During ontogenesis, there is a transition from the alpha/alpha homodimer to the alpha/beta heterodimer in striated muscle cells, and to the alpha/gamma heterodimer in nerve cells.,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.,induction:Levels of ENO2 increase dramatically in cardiovascular accidents, cerebral trauma, brain tumors and Creutzfeldt-Jacob disease.,pathway:Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 4/5.,similarity:Belongs to the enolase family.,subcellular location:Can translocate to the plasma membrane

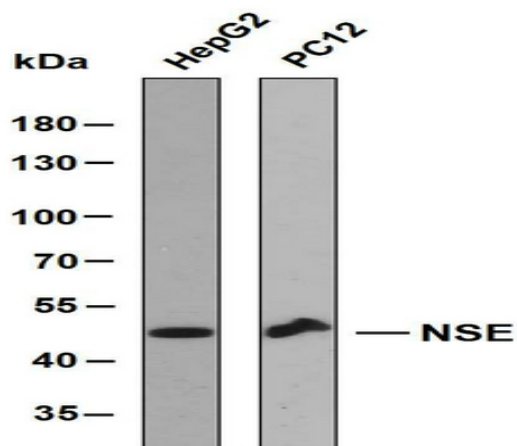
Subcellular Location : Cytoplasmic

Expression : 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.

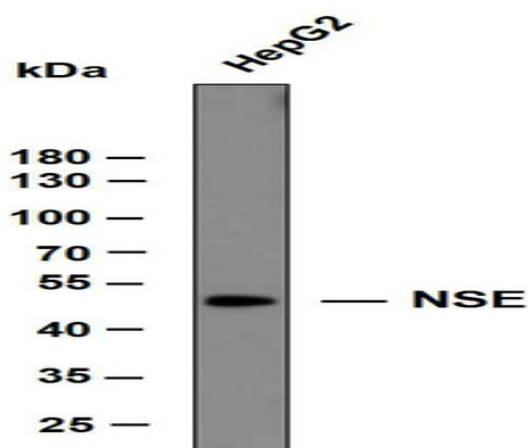
Products Images



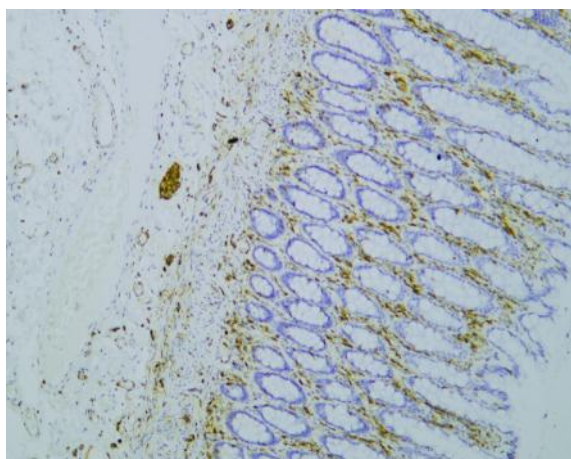
Human pancreas tissue was stained with Anti-Neuron-Specific Enolase (ABT209) Antibody



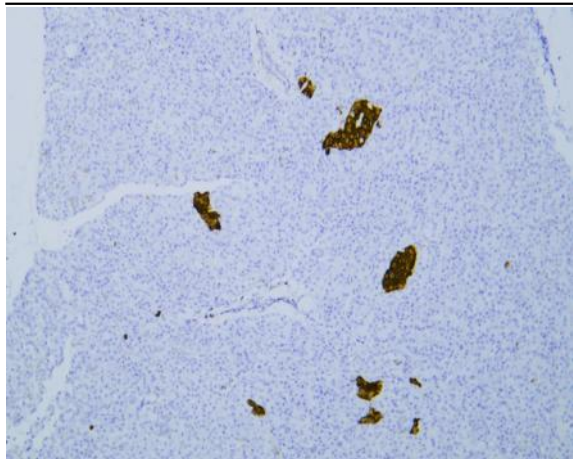
Various whole cell lysates were separated by 8% SDS-PAGE, and the membrane was blotted with anti-NSE antibody. The HRP-conjugated anti-Mouse IgG antibody was used to detect the antibody.



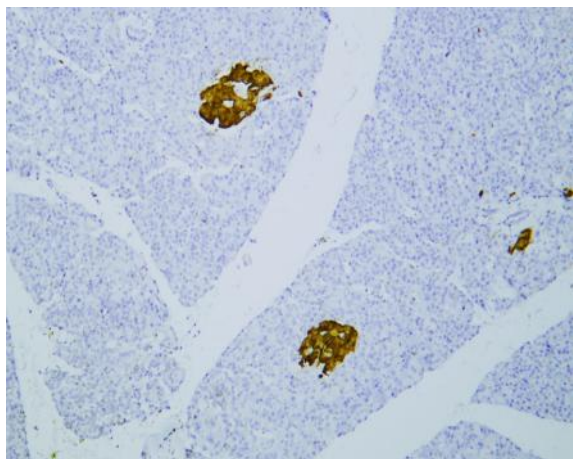
Whole cell lysates of HepG2 were separated by 10% SDS-PAGE, and the membrane was blotted with anti-NSE antibody. The HRP-conjugated anti-Mouse IgG antibody was used to detect the antibody.



Human colon tissue was stained with Anti-NSE (PT2281) Antibody



Human pancreas tissue was stained with Anti-NSE (PT2281) Antibody



Human pancreas tissue was stained with Anti-NSE (PT2281) Antibody