



# Neuron-Specific Enolase(NSE) mouse mAb(PT2281)

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Catalog No</b>                  | YP-Ab-15472                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Applications</b>                | IHC, WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Gene Name</b>                   | ENO2                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen</b>                   | Synthesized peptide derived from human Neuron-Specific Enolase(NSE)                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Specificity</b>                 | This antibody detects endogenous levels of human Neuron-Specific Enolase(NSE). Heat-induced epitope retrieval (HIER) TRIS-EDTA of pH9.0 was highly recommended as antigen repair method in paraffin sect                                                                                                                                                                                                                                                                 |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Source</b>                      | Mouse, Monoclonal/IgG1, Kappa                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Purification</b>                | The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.                                                                                                                                                                                                                                                                                                                                                               |
| <b>Dilution</b>                    | IHC-p 1:100-500, WB 1:200-1000                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Synonyms</b>                    | ENO2;Neural enolase;Gamma enolase;Enolase 2;EC:4.2.1.11;Enolase;Neuron-Specific Enolase(NSE);Gamma-enolase (EC 4.2.1.11;2-phospho-D-glycerate hydro-lyase;Neuron-specific enolase;NSE)                                                                                                                                                                                                                                                                                   |
| <b>Observed Band</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Calculated Molecular Weight</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Cell Pathway</b>                | Cytoplasm . Cell membrane . Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form. .                                                                                                                                                                                                                                                                                                                        |
| <b>Tissue Specificity</b>          | 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.                                                                                                                                                                                                                               |
| <b>Function</b>                    | catalytic activity:2-phospho-D-glycerate = phosphoenolpyruvate + H(2)O., 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

**Background**

enolase 2(ENO2) Homo sapiens 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. [provided by RefSeq, Jul 2008],

**matters needing attention**

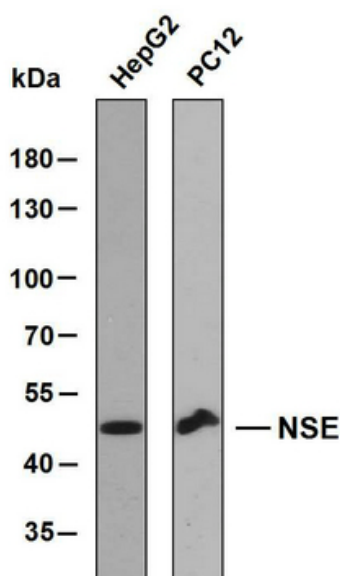
Avoid repeated freezing and thawing!

**Usage suggestions**

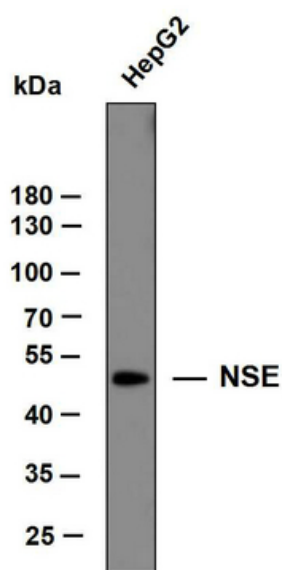
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



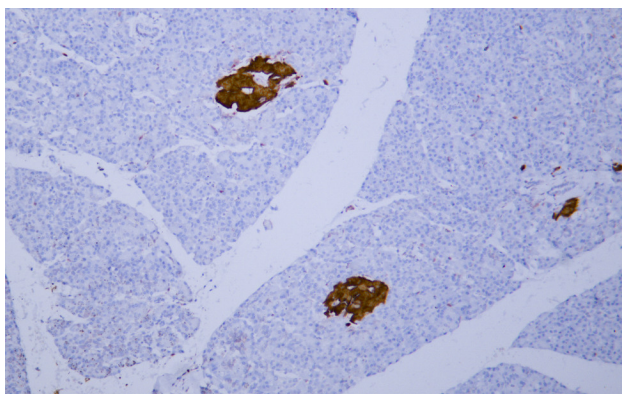
## Products Images



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. Predicted band size: 47 kDa



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. Predicted band size: 47 kDa



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