

# Novocastra™ Lyophilized Mouse Monoclonal Antibody Neuron Specific Enolase

## Product Code: NCL-NSE-435

<b>Intended Use</b>	FOR RESEARCH USE ONLY.
<b>Specificity</b>	Human neuron specific enolase.
<b>Clone</b>	22C9
<b>Ig Class</b>	IgG2b
<b>Antigen Used for Immunizations</b>	Prokaryotic recombinant protein corresponding to aa 220-314 of the human neuron specific enolase molecule.
<b>Hybridoma Partner</b>	Mouse myeloma (p3-NS1-Ag4-1).
<b>Preparation</b>	Lyophilized tissue culture supernatant containing 15 mM sodium azide. Reconstitute with the volume of sterile distilled water indicated on the vial label.
<b>Effective on Frozen Tissue</b>	Not evaluated.
<b>Effective on Paraffin Wax Embedded Tissue</b>	Yes

**Recommendations on Use** Immunohistochemistry: Typical working dilution 1:200–1:400. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Typical working dilution 1:500–1:1000. (ECL™, Amersham Pharmacia Biotech).

**Positive Controls** Immunohistochemistry: Bowel.  
Western Blotting: Brain, SAOS 2, PC3 cell lines.

**Staining Pattern** Cytoplasmic.

**Storage and Stability** Store unopened lyophilized antibody at 4 °C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. The reconstituted antibody is stable for at least two months when stored at 4 °C. For long term storage, it is recommended that aliquots of the antibody are frozen at -20 °C (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Prepare working dilutions on the day of use.

**General Overview** Enolase is a glycolytic enzyme catalyzing the reaction pathway between 2-phosphoglycerate and phosphoenolpyruvate. In humans, enolase molecules are dimers composed of three distinct subunits ( $\alpha$ ,  $\beta$ ,  $\gamma$ ). The  $\alpha$  and  $\gamma$  subunits are of approximately 47 kD and 45 kD respectively. Neuron specific forms of enolase are either  $\gamma\gamma$  homodimers or  $\alpha\gamma$  heterodimers and are located mainly in nervous tissue and neuroendocrine cells. However, neuron specific enolase (NSE) is also found in striated and smooth muscle cells, T cells, megakaryocytes and some platelets.

**General References** Massarelli G, Onida G A, Piras M A, et al.. *Anticancer Research*. 19 (5B): 3933–3938 (1999).  
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