

## Product specifications

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Name	Anti-h NSE 9601 SPTN-5
Specificity	Antibody recognizes human neuron-specific enolase, $\gamma$ -isoform
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components
Product code	100388
Product buffer solution	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative
Shelf life and storage	36 months from manufacturing at 2–8 °C
Subclass	IgG <sub>1</sub>
Analyte description	Neuron-specific enolase (NSE) has been detected in patients with certain tumors, namely: neuroblastoma, small cell lung cancer, medullary thyroid cancer, carcinoid tumors, pancreatic endocrine tumors, and melanoma. Studies of NSE as a tumor marker have concentrated primarily on patients with neuroblastoma and small cell lung cancer. Measurement of NSE levels in patients with these two diseases can provide information about the extent of the disease and the patient's prognosis, as well as about the patient's response to treatment.

## Parameters tested on each lot

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Product appearance	Liquid, may turn slightly opaque during storage
Product concentration	5.0 mg/ml (+/- 10 %)
Immunoreactivity	80–120 % compared to the reference sample in an FIA test
IEF Profile	6.6–7.7
Purity	≥ 95 %

## Kinetic parameters

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Association rate constant	Not Determined (N/D)
Dissociation rate constant	N/D
Affinity constant	$K_A = 4.3 \times 10^8$ 1/M
Determination method	SPR analysis (Biacore)
Determination antigen	NSE, Scripps Laboratories (Cat N0224, Lot BF249001)

**Legal disclaimer**

**Cross-reactivities** Recognizes NNE (non-neuronal enolase) < 1.6 %

**Epitope** Group D as described in Paus et al. (2011)

**Pair recommendations**

		DETECTION	
		9601	9602
CAPTURE	9601	-	+
	9602	+	-

Please note that pair recommendations are based on results obtained by our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations are only indicative.

**Platforms tested** FIA, CLIA

**Antigens tested** Recombinant NSE antigen, Medix Biochemica 610150, and native NSE antigen Lee Biosolutions 430-11.

TEMPERATURE, TIME	RESULT
-70 °C, 21 days	OK
-20 °C, 21 days	OK
+4 °C, 21 days	OK
+35 °C, 21 days	OK
+45 °C, 7 days	OK

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody. Please note that the shelf life given on the first page is based on real time stability testing at 2–8 °C in the product buffer.

**Miscellaneous** Note that antibody binding requires Mg<sup>2+</sup>-ions and is sensitive to chelating agents (EDTA, EGTA, citrate).

**References** Paus, E., Hirzel, K., Lidqvist, M., Höyhty, M., and Warren, D.J. (2011) TD-12 workshop report: characterization of monoclonal antibodies to neuron-specific enolase. *Tumor Biol.* 32:819-829.

