

## PRODUCT SPECIFICATIONS

<b>Name</b>	Anti-h NSE 9601 SPTN-5
<b>Specificity</b>	Antibody recognizes human neuron-specific enolase, $\gamma$ -isoform
<b>Description</b>	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components
<b>Product code</b>	100388
<b>Product buffer solution</b>	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative
<b>Shelf life and storage</b>	36 months from manufacturing at 2–8 °C
<b>Analyte description</b>	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

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

## PARAMETERS DETERMINED DURING PRODUCT DEVELOPMENT

<b>Subclass</b>	IgG <sub>1</sub>
<b>Association rate constant</b>	Not Determined (N/D)
<b>Dissociation rate constant</b>	N/D
<b>Affinity constant</b>	4.3 x 10 <sup>8</sup> l/mol
<b>Determination method</b>	SPR analysis (Biacore)
<b>Determination antigen</b>	NSE, Scripps Laboratories (Cat N0224, Lot BF249001)

**Cross-reactivities**

NNE (non-neuronal enolase) < 1.6 %

**Epitope**

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

**Pair recommendations**
**CAPTURE ANTIBODY**

9602

9601

**DETECTION ANTIBODY**

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.

**Product stability**
**TEMPERATURE, TIME**

-70 °C, 21 days

-20 °C, 21 days

+4 °C, 21 days

+35 °C, 21 days

+45 °C, 7 days

**RESULT**

OK

OK

OK

OK

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).

Antibody recognizes native NSE antigen, Lee Biosolutions 430-11.

**References**

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

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