

# Neuron Specific Enolase, NSE

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## General:

Neuron-specific enolase (NSE) is an isomer of the widely distributed glycolytic enzyme 2-phospho-D-glycerate hydrolase, composed of two subunits. NSE is localized in neurons and in peripheral and central neuroendo-crine cells. Tumors arising from APUD cells (amine precursor uptake and de-carboxylation cells) may contain high amounts of NSE.

NSE is recognized as a tumor marker for rapid growing small cell lung cancer with a sensitivity of 60% (in late stages > 80%). The test is not useful as a screening test due to other NSE-positive levels in neuroblastoma, pancreatic islet cell cancer, carcinoid tumor, medullary thyroid carcinoma, and pituitary adenomas.

Indication: Therapy monitoring in small-cell bronchial carcinoma, possibly in combination with CEA and imaging. Unsuitable as screening test.

Material: 1 ml serum, **frozen**

Pre-analytics: hemolysis-free serum

TAT: 5-7 days\*

Method: CLIA

Units: µg/l

Ref.- range: <18.3

Note: levels > 25 ng/ml point to NSE forming tumor. *See also Tumor markers*

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>