NSE Antibody [clone ENO2/7447] (V4223)

| Catalog No.	Formulation	Size
V4223-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4223-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4223SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ENO2/7447
Purity	Protein A/G affinity
UniProt	P09104
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This NSE antibody is available for research use only.

Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using antibody to NSE gamma (ENO2/7447). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a mAb to its intended target. A mAb is considered to specific to its intended target, if the mAb has an S-score of at least 2.5. For example, if a mAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that mAb to protein X is equal to 29.
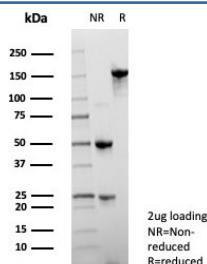
SDS-PAGE analysis of purified, BSA-free NSE gamma antibody (clone ENO2/7447) as confirmation of integrity and purity.
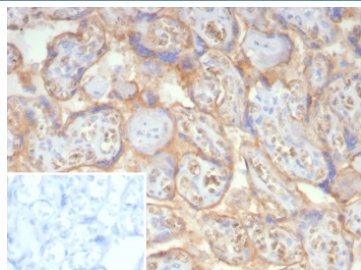
IHC staining of FFPE human placental tissue with NSE gamma antibody (clone ENO2/7447). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

This monoclonal antibody recognizes a protein of about 50kDa, which is identified as gamma-enolase. Three isoenzymes of enolases are identified, alpha, beta and gamma. Alpha-isoform is expressed in most tissues, whereas beta-form is expressed predominantly in muscle tissue whereas gamma-enolase is found only in nervous tissue. These isoforms exist as both homodimers and heterodimers, and they play a role in converting phosphoglyceric acid to phosphenolpyruvic acid in the glycolytic pathway. NSE-gamma is a useful marker to identify peripheral nerves and tumors of neuro-endocrine origins, such as pheochromocytomas. It it be usually employed in combination with other markers such as Synaptophysin, Chromogranin A, and Neurofilament.

Application Notes

Optimal dilution of the NSE antibody should be determined by the researcher.

Immunogen

A recombinant fragment of human NSE gamma (within amino acids 416-433) was used as the immunogen for the NSE antibody.

Storage

Aliquot the NSE antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.