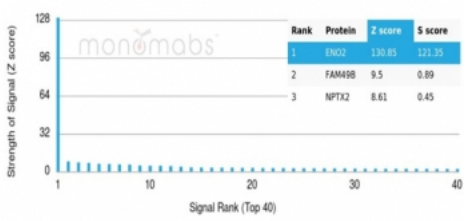
NSE Antibody / Microarray Specificity Validated Antibody [clone ENO2/6680] (V4211)

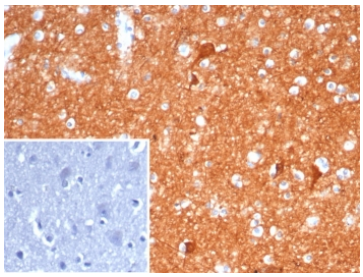
Catalog No.	Formulation	Size
V4211-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4211-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4211SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

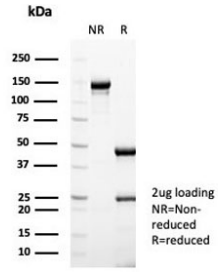
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	ENO2/6680
Purity	Protein A/G affinity
UniProt	P09104
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This NSE Antibody / Microarray Specificity Validated Antibody is available for research use only.



NSE Antibody microarray specificity validation. Protein microarray analysis of Neuron Specific Enolase (ENO2) using NSE Antibody clone ENO2/6680 demonstrates strong and selective binding to ENO2, with a high Z score and signal intensity relative to other tested proteins. Minimal reactivity is observed with non-target proteins, supporting high specificity and low cross-reactivity. The ranking profile highlights ENO2 as the top-binding target, confirming the antibodyâ€™s selective recognition and suitability for applications requiring validated specificity.



NSE Antibody Human Brain IHC. Immunohistochemistry staining of FFPE human brain tissue with NSE gamma antibody (clone ENO2/6680). 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.



SDS-PAGE analysis of purified, BSA-free NSE Antibody / Microarray Specificity Validated Antibody (clone ENO2/6680) as confirmation of integrity and purity.

Description

Neuron-specific enolase (NSE), also known as Gamma-enolase or ENO2, is a glycolytic enzyme predominantly expressed in neurons and neuroendocrine cells, where it serves as a widely used marker of neuronal differentiation and neuroendocrine lineage. NSE is localized to the cytoplasm and is frequently used to identify neuronal and neuroendocrine cell populations in both normal and disease contexts. Accurate detection of ENO2 is particularly important due to the presence of closely related enolase isoforms, including alpha-enolase (ENO1) and beta-enolase (ENO3), which share significant sequence homology but exhibit distinct tissue-specific expression patterns.

NSE antibody, also referred to as ENO2 antibody or Gamma-enolase antibody in the literature, recognizes a cytoplasmic protein enriched in neuronal and neuroendocrine tissues. The NSE Antibody clone ENO2/6680 is differentiated by microarray-based specificity validation, providing a high-confidence assessment of selective ENO2 recognition. Protein microarray analysis demonstrates strong and preferential binding to ENO2 relative to other proteins, including structurally related enolase family members, supporting minimal cross-reactivity and improved target specificity.

This level of specificity is critical in applications where accurate protein identification is required, particularly in complex biological samples containing multiple enolase isoforms or heterogeneous cell populations. By reducing off-target binding, this antibody supports more reliable interpretation of staining patterns and signal detection, enabling clearer distinction between neuronal, neuroendocrine, and non-neuronal cell types. This is especially important in studies of tumor tissues, where overlapping marker expression and cellular heterogeneity can complicate data analysis.

Microarray-based validation provides a comprehensive and unbiased approach to evaluating antibody specificity across a large panel of proteins under standardized conditions. The strong signal intensity and top-ranking binding to ENO2 observed for clone ENO2/6680 reinforce its selective recognition profile and suitability for applications requiring validated antibody performance. This approach complements traditional validation methods by offering a broader view of potential cross-reactivity and binding behavior.

Clone ENO2/6680 enables consistent and reproducible detection of Neuron Specific Enolase in research applications where specificity is a primary concern. Its validated binding profile supports confident use in studies of neuronal biology, neuroendocrine differentiation, and protein expression analysis, particularly in settings where distinguishing closely related proteins is essential.

This antibody targets Neuron Specific Enolase in research applications requiring high-confidence, specificity-validated detection of neuronal and neuroendocrine markers, making it well suited for studies of protein expression, cellular identity, and lineage-specific analysis.

For detection of neuron-specific enolase (NSE), also known as gamma enolase, across tissue types, see our NSE antibody.

Application Notes

Optimal dilution of the NSE Antibody / Microarray Specificity Validated Antibody should be determined by the researcher.

Immunogen

A recombinant fragment of human protein (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.

Alternate Names

NSE antibody, Neuron Specific Enolase antibody, ENO2 antibody, Gamma-enolase antibody, specificity validated NSE antibody, ENO2 specificity antibody

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