

DESCRIPTION

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|---------------------------|---|
| Species Reactivity | Human/Mouse/Rat |
| Specificity | Detects human nNos in direct ELISAs and Western blots. |
| Source | Monoclonal Mouse IgG ₁ Clone # 85327 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | <i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human nNOS Ser218-Ser1434 Accession # P29475 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

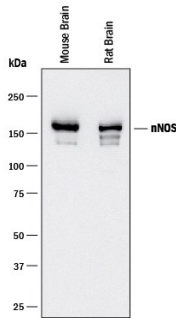
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|-----------------------------|----------------------------------|---------------|
| Western Blot | 0.5 µg/mL | See Below |
| Immunohistochemistry | 5-25 µg/mL | See Below |

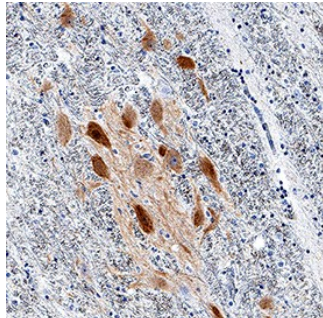
DATA

Western Blot



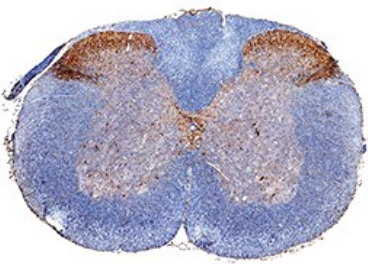
Detection of Mouse and Rat nNOS by Western Blot. Western blot shows lysates of mouse brain tissue and rat brain tissue. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human/Mouse/Rat nNOS Monoclonal Antibody (Catalog # MAB24162) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for nNOS at approximately 160 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



nNOS in Human Brain. nNOS was detected in immersion fixed paraffin-embedded sections of human brain (substantia nigra) using Mouse Anti-Human/Mouse/Rat nNOS Monoclonal Antibody (Catalog # MAB24162) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cell bodies and processes. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

Immunohistochemistry



nNOS in Mouse Spinal Cord. nNOS was detected in perfusion fixed frozen sections of mouse spinal cord using Mouse Anti-Human/Mouse/Rat nNOS Monoclonal Antibody (Catalog # MAB24162) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to dorsal horn. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

PREPARATION AND STORAGE

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|--------------------------------|--|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

nNOS is one of three NOS enzymes that catalyze the oxidation of L-arginine to L-citrulline and nitric oxide. nNOS exists as homodimers containing a cytochrome P450-like prosthetic heme group in the N-terminal half. It also has a tightly bound FAD and FMN group in the C-terminal half. At least 4 isoforms of human nNOS are known. Human nNOS shares about 55% amino acid sequence identity with eNOS and iNOS. It also shares 96% sequence identity with mouse or rat nNOS.