

Mouse Anti-NOS1/nNOS [MD326]: MC0636

Intended Use: For Research Use Only

Description: Nitric oxide synthases (NOSs) are a family of enzymes catalyzing the production of nitric oxide (NO) from L-arginine, oxygen, and cofactors. NO is an important cellular signaling molecule. It helps modulate vascular tone, insulin secretion, airway tone, and peristalsis, and is involved in angiogenesis and neural development. It may function as a retrograde neurotransmitter. Three family members have been characterized: neuronal NOS (nNOS or NOS1), which is found primarily in neuronal tissue; inducible NOS (iNOS or NOS2), which is induced by interferon gamma and lipopolysaccharides in the kidney and cardiovascular system; and endothelial NOS (eNOS or NOS3), which is expressed in blood vessels. NO is a messenger molecule with diverse functions throughout the body, including the maintenance of vascular integrity, homeostasis, synaptic plasticity, long-term potentiation, learning, and memory.

Specifications:

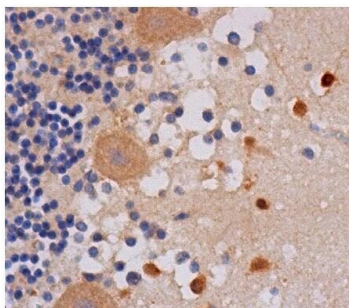
Clone:	MD326
Source:	Mouse
Isotype:	IgG2b/k
Reactivity:	Human
Immunogen:	Epitope of human NOS1 aa 2-300
Localization:	Cytoplasm and/or nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, ELISA, IF, IP, WB
Package:	

Description	Catalog No.	Size
NOS1/nNOS [MD326] Concentrated	MC0636	1 ml

IHC Procedure*:

Positive Control Tissue:	Thalamus and cerebellum tissue
Concentrated Dilution:	25-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human cerebellum tissue stained with anti-NOS1 using DAB

References:

1. First study on the peptidergic innervation of the brain superior sagittal sinus in humans. Simone Sampaolo, et al. Neuropeptides. Oct;65:45-55, 2017.
2. Exon 45 skipping through U1-snRNA antisense molecules recovers the Dys-nNOS pathway and muscle differentiation in human DMD myoblasts. Valentina Cazzella, et al. Mol Ther. Nov;20(11):2134-42, 2012.