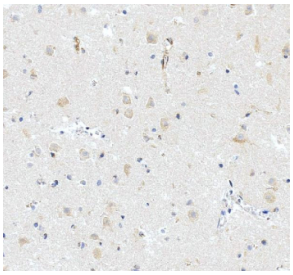
iNOS Antibody / NOS2 (R32711)

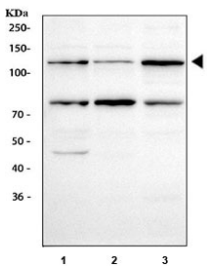
Catalog No.	Formulation	Size
R32711	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P35228
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This iNOS antibody is available for research use only.



IHC staining of FFPE human brain tissue with iNOS antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) HeLa, 2) Caco-2 and 3) SH-SY5Y cell lysate with iNOS antibody at 0.5ug/ml. Predicted molecular weight ~130 kDa.

Description

iNOS (inducible nitric oxide synthase), also known as NOS2, is an enzyme responsible for the high-output production of nitric oxide (NO) in response to inflammatory stimuli. Unlike the constitutive forms of nitric oxide synthase (eNOS and nNOS), iNOS is expressed only after induction by cytokines, microbial products, or other stress signals. Nitric oxide produced by iNOS acts as a signaling and effector molecule, influencing vascular tone, immune defense, and inflammatory responses. Researchers often use an iNOS antibody to study inflammation and host-pathogen interactions.

iNOS plays a central role in innate immunity by producing large amounts of nitric oxide to combat pathogens such as bacteria, viruses, and parasites. This antimicrobial activity, however, can also contribute to tissue damage and inflammatory pathology if left unchecked. Dysregulation of iNOS has been implicated in autoimmune diseases, chronic inflammatory conditions, cardiovascular dysfunction, and neurodegenerative disorders. Employing an iNOS antibody provides a powerful tool for understanding nitric oxide-mediated signaling and disease mechanisms.

In addition to its immune functions, iNOS has been studied in cancer, where nitric oxide can promote or inhibit tumor growth depending on concentration and microenvironmental context. It also plays a role in vascular biology, contributing to blood pressure regulation and angiogenesis under pathological conditions. Using an iNOS antibody allows researchers to monitor expression levels, localization, and activity across different tissues and disease models.

NSJ Bioreagents provides a high-quality iNOS antibody validated for applications including western blot, immunohistochemistry, and immunofluorescence. By choosing an iNOS antibody from NSJ Bioreagents, researchers gain a reliable reagent for studies of inflammation, immune defense, and disease pathology.

Application Notes

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

Immunogen

Amino acids 1088-1126 (ARDVAHTLKQLVAAKLKLNEEQVEDYFFQLKSQKRYHED) from the human protein were used as the immunogen for the iNOS antibody.

Storage

After reconstitution, the iNOS antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.