

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human iNOS. By using synthetic peptides, the epitope recognized by this antibody has been mapped to aa 781-798 of human iNOS. The corresponding sequence of mouse iNOS is identical.
Source	Monoclonal Mouse IgG ₁ Clone # 2D2-B2
Purification	Protein A or G purified from ascites
Immunogen	Recombinant human iNOS Pro781-His798 Accession # P35228
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Inducible nitric oxide synthase (iNOS) is a widely expressed, approximately 130 kDa enzyme that catalyzes the conversion of L-arginine to nitric oxide (NO) plus citrulline. NO is a bioactive mediator that plays an important role in hemodynamics by inducing vascular smooth muscle relaxation. iNOS is constitutively expressed in the kidney. In other tissues, it is inducibly expressed during inflammation, oxidative stress, and hyperglycemia. iNOS activity is elevated in a variety of disease states including atherosclerosis, heart failure, sepsis, solid tumors, and type 2 diabetes. Increased production of NO mediates acute kidney injury, TNF-alpha induced muscle wasting, and the increased radiosensitivity of hypoxic tumor cells. Within amino acids 781-798, human iNOS shares 89% and 72% aa sequence identity with mouse and rat iNOS, respectively.

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