

PRODUCT SPECIFICATION

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HYB 153-02 Anti Nitrite Oxidoreductase (α -NOR)

Mouse monoclonal antibody

Article No.	64657 (0.2 mL), 101087 (1.0 mL)		
Product Name	HYB 153-02 Anti Nitrite Oxidoreductase (α -NOR)		
Clone	1C4		
Subclass	IgG1 / Kappa		
Description	<p>Preparation: Protein-A purified</p> <p>Concentration: 1 mg/mL \pm 10%, based on A₂₈₀. See Certificate of Analysis for details.</p> <p>Solvent: PBS, pH 7.2 – 7.4</p> <p>Storage: -18 °C or colder</p>		
Antigen	<p>Nitrite Oxidoreductase (NOR) is an enzyme catalysing the oxidation of nitrite and is located at the inner side of the cytoplasmic and intracytoplasmic membranes of <i>Nitrobacter</i> species (1). NOR from <i>N. hamburgensis</i> (2) consists of at least two major subunits, α-NOR and β-NOR, with molecular masses of approximately 130 kDa and 65 kDa respectively.</p> <p>The <i>Nitrobacter</i> species are gram-negative microorganisms ubiquitous in nature and gain energy from the oxidation of nitrite to nitrate.</p>		
Immunogen	Nitrite Oxidoreductase purified from <i>N. hamburgensis</i> .		
Specificity	α -subunit of NOR from <i>N. hamburgensis</i> KB4B, <i>N. winogradskyi</i> agilis KB1B, <i>N. winogradskyi</i> 213, <i>N. winogradskyi</i> 215, <i>N. winogradskyi</i> 255, and <i>N. vulgaris</i> KB ⁴⁸ .		
Epitope Specificity	HYB 153-02 Anti Nitrite Oxidoreductase (α -NOR) clone 1C4 reacts with a different epitope compared with HYB 153-06 Anti Nitrite Oxidoreductase (α -NOR) clone 7G8.		
Reactivity	HYB 153-02 Anti Nitrite Oxidoreductase (α -NOR) clone 1C4 reacts well in ELISA coated with cell extract as well as in immunoblotting with a band of approximately 130 kDa corresponding to the α -subunit of NOR (3-4). HYB 153-02 Anti Nitrite Oxidoreductase (α -NOR) clone 1C4 has also been used for immunofluorescent staining of α -NOR in cells (4).		
Culture Medium	Dulbecco's modified Eagle's medium with 10% fetal calf serum.		
Fusion Partner	X63-Ag8.653.		
Immunization	Female CF1xBalb/c F1 hybrid mice were immunized i.p. with immunogen.		
Application	Method	Usability	References
	ELISA	yes	3-4
	Immunoblotting	yes	4
	Immunofluorescence	yes	4
	Immunocytochemistry	yes	
References	<p>1) Sundermeyer-Klinger, H., Meyer, W., Warninghoff, B. and Bock, E. (1984) Membrane-bound nitrite oxidoreductase of <i>Nitrobacter</i>: evidence for a nitrate reductase system. Arch Microbiol. 140, 153-158.</p> <p>2) Meincke, M.; Bock, E., Kastrau, D. and Kroneck, P.M.H. (1992) Nitrite oxidoreductase from <i>Nitrobacter hamburgensis</i>: redox centers and their catalytic role. Arch. Microbiol. 158, 127-131.</p> <p>3) Amand J, Ahl T, Spieck E. Monoclonal antibodies recognizing nitrite oxidoreductase of <i>Nitrobacter hamburgensis</i>, <i>N. winogradskyi</i>, and <i>N. vulgaris</i>. Appl Environ Microbiol. 1996 Jul;62(7):2352-5.</p> <p>4) Bartosch, S, Wolgast, I, Spieck, E, and Bock, E. Identification of nitrite-oxidizing bacteria with monoclonal antibodies recognizing the nitrite oxidoreductase. Appl.Environ.Microbiol. 1999 65, 4126-4133.</p>		

Conditions

For research use only. Not for use in diagnostic procedures. Not for therapeutic use or applications.

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