

PRODUCT SPECIFICATION

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

Mouse monoclonal antibody

| Article No. | 64657 | | | | | | | | | | | | | | | |
|----------------------------|--|------------|-----------|------------|-------|-----|-----|----------------|-----|---|--------------------|-----|---|-----------------|-----|--|
| Product Name | HYB 153-02 Anti Nitrite Oxidoreductase (α -NOR) | | | | | | | | | | | | | | | |
| Clone | 1C4 | | | | | | | | | | | | | | | |
| Subclass | IgG1 / Kappa | | | | | | | | | | | | | | | |
| Description | <p>Preparation: Protein-A purified</p> <p>Content: 1 mg/mL, based on EB_(1%)B=14.0 at AB₂₈₀</p> <p>Solvent: 0.01 M PB, pH 7.4, with 0.5 M NaCl</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. winograskyi</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 | <table><thead><tr><th>Method</th><th>Usability</th><th>References</th></tr></thead><tbody><tr><td>ELISA</td><td>yes</td><td>3-4</td></tr><tr><td>Immunoblotting</td><td>yes</td><td>4</td></tr><tr><td>Immunofluorescence</td><td>yes</td><td>4</td></tr><tr><td>Immunochemistry</td><td>yes</td><td></td></tr></tbody></table> | Method | Usability | References | ELISA | yes | 3-4 | Immunoblotting | yes | 4 | Immunofluorescence | yes | 4 | Immunochemistry | yes | |
| Method | Usability | References | | | | | | | | | | | | | | |
| ELISA | yes | 3-4 | | | | | | | | | | | | | | |
| Immunoblotting | yes | 4 | | | | | | | | | | | | | | |
| Immunofluorescence | yes | 4 | | | | | | | | | | | | | | |
| Immunochemistry | yes | | | | | | | | | | | | | | | |
| References | <ol style="list-style-type: none">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, 153-158.2) 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, 127-131.3) 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):2352-5.4) 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. | | | | | | | | | | | | | | | |

Conditions

For research use only. Not for use in diagnostic procedures.

The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.

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