

## Anti-NADase (hemolytic streptococcus) antibody, rabbit serum

64-005 100 ul

**Shipping and Storage:** Shipped at 4°C or -20°C and Store at -20°C.

Immunogen: Purified recombinant NADase of Group C hemolytic streptococci expressed in E. coli

Form: Rabbit antiserum added with 0.09 % sodium azide

Reactivity: NADase of Group A, C, and G origins

## Application

- 1) Western blotting (x 2,000~10,000 dilution)
- 2) Immunoprecipitation
- 3) Neutralization of NADase activity
- 4) ELISA

Background: NAD (nicotinamide adenine dinucleotide) hydrolyzing enzyme is one of the extracellular enzymes and toxins produced by hemolytic streptococci. Although its function as a toxin is largely unknown, it has been suggested to be related to pathogenicity of acute infection (1). NADase is produced not only by Group A hemolytic streptococci but also by Group C and Group G strains. The amino acid sequences are highly conserved among them and the antibodies cross-react each other. Upon infection of hemolytic streptococci, the antibody titer to the NADase increases similarly to anti-SLO (Strreptolysin O) antibody.

Data Link UniProtKB/TrEMBLQ5R2E3 (Q5R2E3 STREQ)

References: This antibody was described and used in the following publications.

- 1.Kimoto H *et al* "Genetic and biochemical properties of streptococcal NAD-glycohydrolase inhibitor" *J Biol Chem* **281**: 9181-9189 (2006) PMID: <u>16380378</u>
- Minami M et al. "Clindamycin-Induced CovS-Mediated Regulation of the Production of Virulent Exoproteins Streptolysin O, NAD Glycohydrolase, and Streptokinase in Streptococcus pyogenes" Antimicrob. Agents Chemother. 49:88–96 (2010).

## .PMID: 19805566

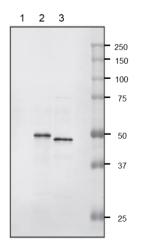


Fig. Detection of NADase in the culture supernatant of hemolytic streptococci with anti-NADase.

Lane 1: Culture medium only (negative control)

Lane 2: Culture supernatant of group A streptococcus

Lane 3: Culture supernatant of group C streptococcus

<sup>\*</sup> This product is for research use only, not for human use.