

Anti-NADase (hemolytic streptococcus) antibody, rabbit serum Polyclonal antibody: rabbit serum

64-005 100 ul,

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.

Application

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

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

Form: Undiluted anti-serum added with 0.09 % sodium azide

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

Storage: Sent at 4°C or -20°C and store at -20°C

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: $\underline{16380378}$

2. 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 supernatant of group A streptococcus

Lane 2: Culture supernatant of group C streptococcus

Lane 3: Culture medium only (negative control)

1 2 3 kDa
- 75
- 50
- 37

^{*} This product is for research use only, not for human use.