

**Polyclonal Anti-Influenza Virus  
Neuraminidase (NA), B/Lee/40, (antiserum,  
Goat)****Catalog No. NR-3114**

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**Lot (NIAID Catalog) No. V-312-501-157****For research use only. Not for human use.****Contributor:**

National Institutes of Allergy and Infectious Diseases (NIAID),  
National Institutes of Health

**Product Description:**

Reagent: Polyclonal antiserum

Host: Goat

Immunizing Antigen: Influenza virus neuraminidase (NA),  
B/Lee/40

**Material Provided/Storage:**

Content: Lyophilized serum

Original Volume: 1.0 mL

Storage Temperature: 4°C

**Functional Activity:**Hemagglutination Inhibition (HI):

Conditions: HI activity was determined as described.<sup>1</sup>

Briefly, the dilutions of antisera were allowed to interact with antigen for 60 minutes at 20°C before the addition of chicken erythrocytes.

Titer:

Influenza B virus, B/Lee/40: 1:80

Influenza B virus, B/Hong Kong/8/73: 1:160

Influenza A virus, A/NWS/34: <1:20

Neuraminidase Inhibition (NI):

Conditions: Neuraminidase (NA) activity was assayed by the method of Warren<sup>2</sup>, except that the color was extracted into *n*-butanol containing 5% (v/v) concentrated hydrochloric acid.<sup>3</sup> NI tests were performed as described.<sup>4</sup> To preclude steric inhibition in the NI tests, an antigenic hybrid possessing an irrelevant hemagglutinin (HA) subunit was used.

Titer:

Influenza B virus, B/Lee/40: 1:1,000

Influenza B virus, B/Hong Kong/8/73: 1:150

Double Immunodiffusion:

Conditions: Hyland double immunodiffusion plates after disruption of purified virus with SDS<sup>5</sup>

Strong Positive Reaction:

Influenza B virus, B/Lee/40

Weak Positive Reaction:

Influenza B virus, B/Hong Kong/8/73

Negative Reaction:

Influenza A virus, A/NWS/34

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Polyclonal Anti-Influenza Virus Neuraminidase (NA), B/Lee/40, (antiserum, Goat), NR-3114."

**Biosafety Level: 1**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2007; see [www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm).

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**References:**

1. Fazekas de St. Groth, S. and R. G. Webster. "Disquisitions on Original Antigenic Sin. I. Evidence in Man." *J. Exp. Med.* 124 (1966): 331-345. PubMed: 5922742.

2. Warren, L. "The Thiobarbituric Acid Assay of Sialic Acids." J. Biol. Chem. 234 (1959): 1971–1975. PubMed: 13672998.
3. Aminoff, D. "Methods for the Quantitative Estimation of N-acetylneuraminic Acid and their Application to Hydrolysates of Sialomucoids." Biochem. J. 81 (1961): 384–392. PubMed: 13860975.
4. Webster, R. G. and H. G. Pereira. "A Common Surface Antigen in Influenza Viruses from Human and Avian Sources." J. Gen. Virol. 3 (1968): 201–208. PubMed: 5698682.
5. Schild, G. C. and H. G. Pereira. "Characterization of the Ribonucleoprotein and Neuraminidase of Influenza A Viruses by Immunodiffusion." J. Gen. Virol. 4 (1969): 355–363. PubMed: 4977660.

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