

## ***Streptococcus pneumoniae*, Strain OREP4**

**Catalog No. NR-13390**

**For research use only. Not for human use.**

### **Contributor:**

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### **Product Description:**

Bacteria Classification: *Streptococcaceae*, *Streptococcus*

Species: *Streptococcus pneumoniae*

Strain: OREP4

Source: The antibiotic-resistant variant *Streptococcus pneumoniae* (*S. pneumoniae*), OREP4 was derived from human wild-type *S. pneumoniae*, strain DS2382-94 by natural selection using increasing concentrations of optochin. *S. pneumoniae*, OREP4 is reported to be resistant to optochin at a concentration of 2 µg per mL.<sup>1</sup>

*S. pneumoniae* is a Gram-positive, α-hemolytic diplococcal aerotolerant anaerobe that is a major cause of pneumonia, bacterial meningitis and otitis media. *S. pneumoniae* has a polysaccharide capsule that acts as a virulence factor for the organism. There are over ninety different capsular types of *S. pneumoniae* which differ in virulence, prevalence, and extent of drug resistance.<sup>2</sup>

### **Material Provided:**

Each vial contains bacterial culture in Todd-Hewitt broth containing 0.5% (w/v) yeast extract and 15% glycerol.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

### **Packaging/Storage:**

NR-13390 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -80°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

### **Citation:**

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: *Streptococcus pneumoniae*, Strain OREP4, NR-13390."

### **Biosafety Level: 2**

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/bmb15/bmb15toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm).

### **Disclaimers:**

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### **References:**

1. Burton, R. L. and M. H. Nahm. "Development and Validation of a Fourfold Multiplexed Opsonization Assay (MOPA4) for Pneumococcal Antibodies." Clin. Vaccine Immunol. 13 (2006): 1004-1009. PubMed: 16960111.
2. [Todar's Online Textbook of Bacteriology](#).

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