

Product Specification Sheet

S. Pneumococcal Serotype 23F Carbohydrate (Spn23F) Antibodies

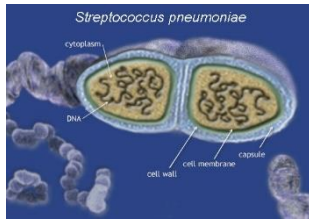
□ Cat # SPN231-S

Rabbit Anti-S. Pneumococcal Serotype 23F Carbohydrate (Spn23F) Antiserum **SIZE:** 100 ul



Streptococcus pneumoniae, or pneumococcus, is a Gram-positive, alpha-hemolytic, aero tolerant anaerobic member of the genus Streptococcus. *S. pneumoniae* is one of the most common causes of **bacterial meningitis** in adults and young adults, along with *Neisseria meningitidis*, and is the leading cause of bacterial meningitis in adults in the world. *S. pneumoniae* have a **polysaccharide** capsule

that acts as a **virulence factor** for the organism; more than 90 different serotypes are known. Genetic information can vary up to 10% between strains. Serotype specific antibodies against the capsular polysaccharides provide protection against the corresponding serotypes. Serotypes specific polysaccharides (free or conjugated to CRM197) are the active ingredients of various vaccines.



Pneumococcal vaccines. Types include **Pneumococcal polysaccharide vaccine** & **Pneumococcal conjugate vaccine.** The polysaccharide vaccine most commonly used today consists of purified polysaccharides from 23 serotypes (1, 2, 3, 4, 5, 6b, 7F, 8, 9N, 9V, 10A, 11A, 12F, 14, 15B, 17F, 18C, 19F, 19A, 20, 22F, 23F and 33F). **Pneumovax-23 by Merck**

contains purified polysaccharides from 23 serotypes and it is **not conjugated**. Pneumococcal conjugate vaccine (PCV) contains polysaccharides conjugated to diphtheria toxin CRM197. There are currently three PCV vaccines available on the global market: Pevnar (called Pevnar in some countries), **Synflorix** and Pevnar 13. **Pevnar-7 or PCV-7** (Wyeth) is a heptavalent vaccine (4, 6B, 9V, 14, 18C, 19F, and 23F), **Synflorix** (GlaxoSmithKline) is a decavalent vaccine (**PCV-10**), meaning that it contains ten serotypes of pneumococcus (1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F, and 23F). **Pevnar 13/PCV-13** (Pfizer) is a triskaivalent vaccine, meaning that it contains thirteen serotypes of pneumococcus (1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F, 23F) which are conjugated to a carrier protein. **Conjugated vaccine** (Pevnar, Synflorix) consists of capsular polysaccharides covalently bound to the **diphtheria toxoid CRM197**, which is highly immunogenic but non-toxic. Among other things, this results in mucosal immunity and eventual establishment of lifelong immunity after several exposures.

Source of Antigen and Antibodies

Antigen	Spn23 F capsular carbohydrate antigen
Ab Host/type	Rabbit, Polyclonal antiserum (Cat # SPN231-S)
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
-ve control	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified)

□ 100ul □ □ solution □ lyophilized powder

Supplied in Buffer: 0.05% azide

Reconstitute powder in 100 ul PBS

Storage

Short-term: unopened, undiluted liquid vials at -200C and powder at 4oC or -20oC..

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Recommended Usage

ELISA (1:500-1:5,000 using 50-100 ng control peptide/well).

Other applications not tested.

Specificity & Cross-reactivity

Spn-23F antibody reacts with Spn23 F serotype. Crossreactivity with other serotype my be observed but it has not been verified. ADI has Spn23-F and other serotypes antibody ELISA kits.

General References : (1) Hasegawa (1994) *JBC* 269:5497; (2) Jung, J. S (1994) *PNAS* 91:13052; (3) Terris, J (1995) *Am J. Physiol.* 269:F775; (4) Fregeri, A (1995) *PNAS* 92:4328; (5) Misaka, T (1996) *FEBS Lett.* 381:208-212.

*This product is for in vitro research use only.

Catalog#	Description
560-051-S	Rabbit Anti-S. Pneumococcal polysaccharide serotype 5 antiserum
560-052-S	Human Anti-S. Pneumococcal polysaccharide serotype 5 antiserum
560-100-07G	Mouse Anti-S. Pneumococcal vaccine (Pevnar-7/PCV-7) IgG ELISA Kit; (7 serotypes: 4,6B,9V,14,18C,19F, and 23F), 96 tests, quantitative
560-110-07M	Human Anti-S. Pneumococcal vaccine (Pevnar-7/PCV-7) IgG ELISA Kit; (7 serotypes: 4,6B,9V,14,18C,19F, and 23F), 96 tests, quantitative
560-130-10G	Mouse Anti-S. Pneumococcal vaccine (Synflorix/PCV-10) IgG ELISA Kit; (10 serotypes: 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F, and 23F), 96 tests, quantitative
560-140-10G	Human Anti-S. Pneumococcal vaccine (Synflorix/PCV-10) IgG ELISA Kit; (10 serotypes: 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F, and 23F), 96 tests, quantitative
560-160-13G	Mouse Anti-S. Pneumococcal vaccine (PCV-13) IgG ELISA Kit; (13 serotypes 1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F, 23F), 96 tests, quantitative
560-170-13G	Human Anti-S. Pneumococcal vaccine (PCV-13) IgG ELISA Kit; (13 serotypes 1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F, 23F), 96 tests, quantitative
560-180-23G	Mouse Anti-S. Pneumococcal vaccine (Pneumovax/CPS23) IgG ELISA Kit; (23 serotypes: 1, 2, 3, 4, 5, 6b, 7F, 8, 9N, 9V, 10A, 11A, 12F, 14, 15B, 17F, 18C, 19F, 19A, 20, 22F, 23F and 33F), 96 tests, quantitative
560-190-23G	Human Anti-S. Pneumococcal vaccine (Pneumovax/CPS23) IgG ELISA Kit; (23 serotypes: 1, 2, 3, 4, 5, 6b, 7F, 8, 9N, 9V, 10A, 11A, 12F, 14, 15B, 17F, 18C, 19F, 19A, 20, 22F, 23F and 33F), 96 tests, quantitative

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