



# Mouse Anti-S. pneumoniae CPS 14 Monoclonal antibody, clone 1229 (CABT-CS129)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

|                           |                                                                                                                                                         |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specificity</b>        | Recognizes the 14 serotype of PCPS specifically, no cross reactivity with other serotypes of PCPS (1, 3, 5, 9V, 4, 6A, 6B, 7F, 18, 19A, 19F, 23F, etc). |
| <b>Target</b>             | PCPS                                                                                                                                                    |
| <b>Immunogen</b>          | The 14 serotype of Pneumococcal capsular polysaccharide (PCPS).                                                                                         |
| <b>Isotype</b>            | IgG                                                                                                                                                     |
| <b>Source/Host</b>        | Mouse                                                                                                                                                   |
| <b>Species Reactivity</b> | S. pneumoniae                                                                                                                                           |
| <b>Clone</b>              | 1229                                                                                                                                                    |
| <b>Purification</b>       | > 95% based on SDS-PAGE                                                                                                                                 |
| <b>Conjugate</b>          | unconjugated                                                                                                                                            |
| <b>Applications</b>       | ELISA, Immunoturbidimetry                                                                                                                               |
| <b>Format</b>             | Liquid                                                                                                                                                  |
| <b>Concentration</b>      | 1 mg/mL                                                                                                                                                 |
| <b>Size</b>               | 100 µg, 1 mg                                                                                                                                            |
| <b>Buffer</b>             | 0.1M Tris-HCl, 0.15M NaCl, 0.1mM EDTA, 0.05M Glycine                                                                                                    |
| <b>Preservative</b>       | None                                                                                                                                                    |

**Storage**

Store the product at -20°C. Product is stable for about 6 weeks at 2-8°C as an undiluted liquid. Prepare working dilution prior to use. Avoid repeated freezing and thawing.

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## BACKGROUND

**Introduction**

*Streptococcus pneumoniae*, or pneumococcus, is an important pathogen worldwide and causes a wide range of diseases, mostly in young children and the elderly. There are 91 serotypes of pneumococcus, each of which produces a unique polysaccharide, called the capsule, that attaches to the bacterial surface and prevents it from being cleared by the host. Capsular polysaccharide (CPS) assembly and localization in bacteria is a complex, multienzyme process leading to anchoring of the CPS polymer on the outer surface of the cell. For pathogens, the protective layer of the CPS can be important for adhesion, biofilm formation, and resistance to complement-mediated opsonophagocytosis and lysis. Although substantial information regarding the syntheses of these polymers has accumulated, less is known about the critical steps involved in their attachment to the bacterial surface.

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**Keywords**

Pneumococcal capsular polysaccharide; Pneumococcal; capsular polysaccharide; PCPS; Pneumococcal polysaccharide; CPS; *S. pneumoniae* CPS; *Streptococcus pneumoniae* capsular polysaccharide; Pneumococcal CPS; *Streptococcus pneumoniae*

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