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Mouse anti-Staphylococcal Alpha Hemolysin Toxin mAb (8B7)

Catalog #: 0210-001

Lot #: 1312001

Immunogen: Polypeptide sequence of *Staphylococcus* alphahemolysin targeting the N terminus of the mature toxin.

Description: Mouse monoclonal antibody (mAb) reactive to full length *Staphylococcus aureus* alpha-hemolysin (alpha-toxin). The antibody detects the antigen produced by *S. aureus* strains in Western Blotting and ELISA and neutralizes the hemolytic activity of the toxin.

Supplied: 100 μg is supplied in PBS at a concentration of 1.68 mg/mL.

Purification: Antibody is purified using immobilized protein A.

Clonality: Not determined.

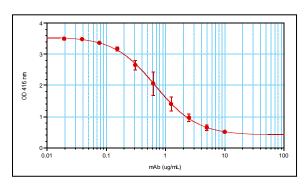
Relevance: The antibody can be used for detection and neutralization of alpha-toxin produced by virulent strains of *S. aureus*.

Recommended Dilutions: Optimal use dilution should be determined for each individual application.

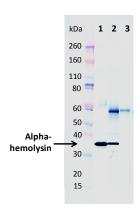
Storage: 2-3 weeks +4°C, -20°C long term

Cross Reactivity: This antibody does not appear to cross react with Staphylococcal enterotoxin B (SEB), rLukS-PV or rLukF-PV based on historical ELISA data. As with most antibodies, this antibody interacts with Protein A in *S. aureus* culture supernatant via the Fc region.

Toxin neutralization: Using a rabbit RBC lysis assay, EC₅₀ of this antibody for neutralization of 0.3 μ g/mL of alpha-toxin was determined to be 0.676 μ g/mL.



Western Blot Data:



Western blot was detected with anti-alpha hemolysin mAb 8B7 at 1 $\mu g/mL$ and visualized using an anti-mouse IgG-HRP conjugate and TMB membrane substrate. MW denotes Novex Sharp prestained protein markers. Alpha-toxin at 100 ng (lane 1) is visualized as a protein band at $\sim\!33$ kDa. Protein band at $\sim\!33$ kDa was also detected in the culture supernatant of USA300 (lane 2), but not in the negative control USA300 Δ Hla strain (lane 3).

ELISA Data:	OD 650		
Antibody (μg/mL)	Alpha-Toxin @ 1 μg/mL	Staph enterotoxin B @ 1 µg/mL	rLukS-PV @ 1 μg/mL
2.0000	1.6850	0.0710	0.1160
0.6325	1.1520	0.0530	0.0890
0.2000	0.6750	0.0510	0.0720
0.0632	0.3510	0.0480	0.0680
0.0200	0.1960	0.0500	0.0670
0.0063	0.0910	0.0740	0.0690
0.0020	0.0630	0.0630	0.0770
0.0006	0.0570	0.0540	0.0800
0.0000	0.0610	0.0560	0.0850

Various Staphylococcal toxins were coated to plates at a concentration of 1 $\mu g/mL$ in PBS. Anti-alpha hemolysin mAb 8B7 was serially diluted semi-log from 2 $\mu g/mL$ and incubated on the toxin coated plates. Washed plates were detected with antimouse IgG-HRP conjugate and TMB substrate. OD650 is reported above.

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