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# **Product Information**

# Anti-Staphylococcal Enterotoxin A

produced in rabbit, delipidized, whole antiserum

Catalog Number S7656

### **Product Description**

Anti-Staphylococcal Enterotoxin A is produced in rabbit using purified toxin from *Staphylococcus aureus* as immunogen. The antiserum has been treated to remove lipoproteins.

By dot blot immunoassay, using ligands immobilized on nitrocellulose membrane (50-500 ng/dot), the antiserum reacts versus Staphylococcal Enterotoxin A, but shows no reaction versus Staphylococcal Enterotoxin B, Cholera Toxin and Pseudomonas Exotoxin A. The product has not been tested for its neutralization potency against active Staphylococcal Enterotoxin A.

Enterotoxins produced by *Staphylococcus aureus* are serologically classified into seven types: enterotoxins A(SEA), B(SEB), C<sub>1</sub>(SEC<sub>1</sub>), C<sub>2</sub>(SEC<sub>2</sub>), C<sub>3</sub>(SEC<sub>3</sub>), D(SED), and E(SEE). Staphylococcal enterotoxins are similar in activity, structure and molecular weight (25-30 kDa). In addition to their role in the pathogenicity of food poisoning, these microbial superantigens have profound effects on the immune system, which make them useful tools for understanding its mechanism. SEA is the most potent T cell mitogen known; its receptors on antigen-presenting cells are major histocompatibility complex class II molecules.<sup>2</sup>

Anti-Staphylococcal Enterotoxin A may be used for studies of the toxin-membrane interaction.

## Reagent

Supplied as a liquid containing 15 mM sodium azide as preservative.

#### **Precautions**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

## **Storage**

For continuous use, store at 2-8 °C for up to one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

#### **Product Profile**

Protein concentration is determined by Biuret.

## <u>Titers</u>

<u>Dot Blot</u>: a minimum 1:20,000 using purified Staphylococcal Enterotoxin A immobilized on nitrocellulose membranes (Protein concentration: 50 ng/dot).

<u>ELISA</u>: a minimum 1:20,000 using Staphylococcal Enterotoxin A.

#### References

- Bergdoll, M., In: Staphylococci and Staphylococcal Infections, Easman, C.S.F., and Adlam, G., (eds), Academic Press, London (1983).
- 2. Pontzer, C., et al., *Proc. Natl. Acad. Sci. (USA)*, **88**, 125 (1991).

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