

Langford Locks
Kidlington
Oxford
OX5 1LH
United Kingdom
Tel: +44 (0)1865 595230

Antibody Datasheet

Product Name: Mouse anti Staphylococcus aureus enterotoxin type G

Clone number: SEI-16

Isotype: Mouse IgG_{2a}

Product code: MAB12248-100

Batch Number:

Amount: 0.1mg

Concentration: 1 mg/ml

Buffer: Phosphate Buffered Saline pH7.4

Preservative: 0.09% Sodium Azide (NaN₃)

Purification: The antibody was purified by affinity chromatography on protein A sepharose.

Specificity: This antibody is specific for enterotoxin type G of *Staphylococcus aureus* (*S.aureus*).

Applications: ELISA, WB. This antibody can be used as a detection antibody with clone SEG-59

(MAB12247) in ELISA assays.

Antigen background: Staphylococcus aureus (S.aureus) is a gram-positive, non-spore forming bacterium

that is a member of the genus *Staphylococcus*, which belongs to the family *Staphylococcaceae*. First recognised in 1880, *S.aureus* exists in many individuals as part of the normal microbiota, inhabiting the skin, nasal passages and respiratory tract. Pathogenic *S.aureus* secrete a range of potent toxins, which are a major cause

of a wide range of pathogenic conditions in humans worldwide.

Enterotoxins, produced by *S.aureus*, are a major cause of food poisoning. Over 30 enterotoxins have been identified to date. Staphylococcus aureus enterotoxin B

(SEB) and SEA are recognised as the most potent enterotoxin within the





Staphylococcal family of toxin. SEB and SEA enterotoxin also acts as a potent bacterial superantigen, stimulating T lymphocytes and binding to major histocompatibility antigens (MHC) on antigen presenting cells of the immune system. Two separate domains on the 28kDa SEB protein are reported to be responsible for the two different functions of the toxin (Fries, B).

Staphylococcus aureus enterotoxins G and I have been associated with minor food poisoning outbreaks in Taiwan. Both toxins are heat stable and are transmitted to humans via contaminated foods including meat, meat products and unpasteurised dairy products. Both enterotoxin I and G have also been linked to cases of toxic shock syndrome, Staphylococcal scarlet fever and neonatal entropathy.

References

Fries BC, Varshney AK. 2013. Bacterial Toxins-Staphylococcal Enterotoxin B. Microbiol Spectr. Dec;1(2)

Storage:

Store at +4°C for up to three months, or at -20°C for longer periods The antibody is shipped at ambient temperature. Avoid repeated freeze/thaw cycles.