

Anti-LPS [S20] Bulk Size Ab00793-11.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

Isotype and Format: Human IgG2, Fc Silent™, Kappa

Clone Number: S20

Alternative Name(s) of Target: lipopolysaccharide; lipopolysaccharide O side chain

UniProt Accession Number of Target Protein:

Published Application(s): neutralize, ELISA

Published Species Reactivity: 06ad P. aeruginosa

Immunogen: Ig-inactivated transgenic mice possessing human heavy and light Igs (strain XMG2) were immunized with heat-killed 06ad P. aeruginosa. The supernatants from the derived hybridomas were screened for IgG mAb production against the 06ad high molecular weight LPS O-side-chain using ELISA.

Specificity: S20 binds to the polysaccharide (PS) portion of the lipopolysaccharide O side chain of a common pathogenic serogroup of P. aeruginosa, 06ad. The antibody also binds Fisher Devlin immunotype 1 P. aeruginosa, (considered part of the 06 serogroup) but there is no cross-reactivity with LPSs from other P. aeruginosa serotypes (strains IATS 011, IATS 016, 170003, and PAO1 Holloway). P. aeruginosa is a human pathogen, which poses a serious risk to individuals with weak immune systems. LPS is a serotypic marker present on the surface of the bacterium.

Application Notes: S20 human MAb is highly opsonic (complement-dependent) for the uptake and killing of live and heat-killed P. aeruginosa by fresh human PMN (polymorphonuclear leukocytes). BALB/c mice rendered neutropenic challenged with 06ad P. aeruginosa saw 100% protection from mortality. S20 can also be used to detect 06ad LPS by ELISA.

Antibody First Published in: Hemachandra Human Monoclonal Antibodies against Pseudomonas aeruginosa Lipopolysaccharide Derived from Transgenic Mice Containing Megabase Human Immunoglobulin Loci Are Opsonic and Protective against Fatal Pseudomonas Sepsis Infect Immun. 2001 Apr;69(4):2223-9 [PMID:11254577](#)

Note on publication: Describes the generation of a human mAb against 06ad P. aeruginosa LPS, its binding properties and its protective potential.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification:

Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.