

Anti-LPS [S20] Standard Size Ab00793-23.3

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

This chimeric rabbit antibody was made using the variable domain sequences of the original Human IgG2 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Rabbit IgG, 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: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. 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.