

## Anti-Mycobacterium avium cell lysate [SurfS1.2] Standard Size Ab03590-21.0

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

This full-length, chimeric mouse antibody was made using the variable domain sequences of the original scFv format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgM, Lambda

**Clone Number:** SurfS1.2

**Alternative Name(s) of Target:**

**UniProt Accession Number of Target Protein:**

**Published Application(s):** functional assay, WB, FC

**Published Species Reactivity:** Mycobacterium avium

**Immunogen:** This antibody was generated by panning a phage library generated from sheep were infected via the oral route with two doses of 10<sup>9</sup> CFU of a low-passage M. avium subsp. paratuberculosis strain W. against mycobacterial cell suspensions were harvested from culture.

**Specificity:** This antibody is specific for Mycobacterium avium. Mycobacterium avium together with Mycobacterium intracellulare causes the disease called Mycobacterium avium-intracellulare infection or Mycobacterium avium complex infection in humans.

**Application Notes:** The scFv version of this antibody was immunoblotted on M. avium subsp. paratuberculosis lysate. The result showed a positive reaction. Furthermore, flow cytometry on cobacterium sp. surface antigen was performed using this antibody, the antibody showed binding to M. avium subsp. avium cells. To determine whether surface-bound SurfS1.2 or SurfS2.2 could influence mycobacterial growth, M. avium subsp. avium was grown in Middlebrook broth, the antibody prevented clumping in M. avium subsp. avium cells. The antibody was also used to magnetically separate M. avium subsp. paratuberculosis from faecal samples (Berger et al, 2006; pmid:16960114).

**Antibody First Published in:** Berger et al. Isolation of High-Affinity Single-Chain Antibodies against Mycobacterium avium subsp. paratuberculosis Surface Proteins from Sheep with Johne's Disease. Clin Vaccine Immunol. 2006 Sep; 13(9): 1022-1029 [PMID:16960114](#)

**Note on publication:** The production of single-chain antibodies with defined specificity for M. avium subsp. paratuberculosis surface proteins was described. Single-chain antibodies (scFv) were generated from sheep with Johne's disease by cloning heavy-chain and lambda light-chain variable regions and

expressing these in fusion with gene III of filamentous phages.

## Product Form

**Size:** 50 µg Purified antibody.

**Purification:** Affinity Purified using a recombinant lectin column

**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.