

## Anti-Alpha-crystallin [B4m3] Bulk size M Ab03593-1.29-BS

This is a Fab fragment with a his-tag.

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

**Isotype and Format:** Mouse Fab fragment, His-Tagged, Lambda

**Clone Number:** B4m3

**Alternative Name(s) of Target:** Acr; hspX; 14 kDa antigen; 16 kDa antigen; Antigen 16kDa (HspX); HSP 16.3; Nox16

**UniProt Accession Number of Target Protein:** P9WMK1

**Published Application(s):** SPR, ELISA

**Published Species Reactivity:** Mycobacterium tuberculosis

**Immunogen:** This antibody was generated by first panning the Nkuku® library [26] against 20 µg/ml of the M. tuberculosis 16 kDa antigen. Second a sublibrary was created using error-prone PCR. Finally the mutant library was panned against 16 kDa M. tuberculosis antigen.

**Specificity:** This antibody is specific for the HspX antigen from Mycobacterium tuberculosis. This antigen acts as a chaperone, as it has a significant ability to suppress the thermal denaturation of alcohol dehydrogenase. Mycobacterium tuberculosis causes the disease tuberculosis.

**Application Notes:** The binding of the scFv version of this antibody to the antigen was characterised by ELISA. Furthermore, surface plasmon resonance was used to determine the binding kinetics of this antibody on 16 kDa protein of M. tuberculosis (Sixholo et al, 2011; PMID:21349739).

**Antibody First Published in:** Sixholo et al. Improving the characteristics of a mycobacterial 16 kDa-specific chicken scFv. Biologicals. 2011 Mar;39(2):110-6. [PMID:21349739](#)

**Note on publication:** A chicken single chain variable fragment (scFv) phage display library was panned against the mycobacterial 16 kDa antigen. Three fusion phages which bound specifically to the antigen were selected, each of which produced low signals in ELISA when secreted as a soluble scFv. One scFv was therefore chosen to be modified in an attempt to improve its binding.

## Product Form

**Size:** 1 mg Purified antibody in bulk size.

**Purification:**

Purified by Immobilized Metal Affinity Chromatography

**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:** See vial label

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