

Anti-S100A8 & S100A9 [5.5] Standard Size Ab00815-13.12

Developed in partnership with Ximbio (www.ximbio.com).

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG4-S228P, Kappa

Clone Number: 5.5

Alternative Name(s) of Target: MRP-8; MRP8; MRP-14; MRP14; CF antigen; CFAG; L1 molecule; p8,14; Calprotectin

UniProt Accession Number of Target Protein: P05109; P06702

Published Application(s): IP, WB, ELISA, FC, IHC

Published Species Reactivity: Human

Immunogen: BALB/c mice were immunized using cells from acute monocytic leukemia patients. The BALB/c spleen cell suspension was fused with Sp2/0-Ag14 cells, and mAb 5.5 was isolated from the hybridoma cells either by radioimmunoassay with 125-I-labelled F(ab')₂ fragments of sheep anti-mouse Ig as second layer, or by indirect immunofluorescence using rhodamine-conjugated goat anti-mouse Ig as the second layer.

Specificity: mAb 5.5 specifically recognises complexed MRP-8/MRP-14 via the hydrophobic residues in helix IV of MRP-8 (S100A8) exposed during heterodimer formation. mAb recognition of MRP-8 & MRP-14 is calcium dependent. 5.5 epitope is most likely to be formed by linear sequence Phe26-His27-Ala28 in calcium-binding loop I of MRP-8, and by Phe68, Leu72, Ile76 and Lys77 that lie along one face of helix IV.

Application Notes: mAb 5.5 has been used in immunoprecipitation and western blot experiments for the characterisation of p8,14 identified in extracts of monocytes and neutrophils. 5.5 was also used in flow cytometric analysis to show that p8,14 is not a cell surface protein, and in immunohistochemical staining to show that p8,14 is present extracellularly (Edgeworth 1991).

Antibody First Published in: Hogg et al. Monoclonal antibody 5.5 reacts with p8, 14, a myeloid molecule associated with some vascular endothelium 1989. Eur J Immunol. 19(6):1053-61 [PMID:2666142](#)

Note on publication: Describes the activation of Myeloid cells by inflammatory stimuli, resulting in the secretion of p8,14 onto the endothelium. 5.5 was used for the detection of p8,14 to suggest that this molecule is released by myeloid cells adhering onto the endothelium, rather than the endothelium itself in response to inflammatory stimuli.

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.