

## CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name \$100A9, Mouse, clone MU14-2A5

Catalog number HM1102-500UG

Lot number - Expiry date -

Volume - Amount 500 μg

Formulation 0.2 µm filtered in PBS Concentration >0.5 mg/ml

Host Species Rat IgG1 Conjugate None

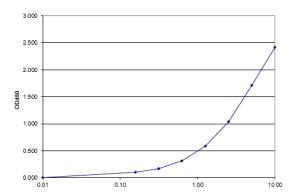
Endotoxin N.A. Purification Protein G

Storage 4°C

## **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes	•	•	•		•	•		•
No								
N.D.				•			•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



IA: HM1102 was used as a detection antibody. The antibody was biotinylated.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- W: A reduced sample treatment and SDS-Page was used. The band size is 13-15 kDa.
- Positive control: Mouse bone marrow cell extracts

## **General Information**

## Description

The monoclonal antibody MU14-2A5 recognizes S100A9. The calcium-binding, migration inhibitory factor-related proteins, MRP-8 (S100A8) and MRP-14 (S100A9) belong to the S100 protein family. MRP14 is co-expressed with human MRP8, a homologue protein in myeloid cells, and plays an essential role in calcium dependent functions during inflammation. This role includes the activation of Mac-1, the  $\beta$ 2 integrin which is involved in neutrophil adhesion to endothelial cells. MRP14 is distinguished from other S100 member proteins by its long C-terminal region.

The expression of MRP-8 (S100A8) and MRP-14 (S100A9) is largely confined to the cytosol of neutrophils and monocytes. The complex formation of these proteins is a calcium-dependent process. The S100A8/A9 heterocomplex, also called MRP-8/MRP-14 complex or calprotectin, comprises 60% of the cytoplasmic protein fraction of circulating polymorphonuclear granulocytes and is also found in monocytes, macrophages and ileal tissue eosinophils. In inflammatory conditions small venueles stain with both anti-S100A8 and S100A9. The staining of the two subunits is always coincident. The S100A8/A9 complex has antibacterial, antifungal and immunomodulating and antiproliferative effects. Besides this it is a potent chemotactic factor for neutrophils.

Immunogen Complete mouse S100A9 protein

Aliases Migration inhibitory factor-related protein 14, MRP 14, Calgranulin B

Gene name: S100a9, Cagb, Mrp14 Gene

**Cross reactivity** Rabbit: No.

Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

**Precautions** For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to

comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent

infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Date

05/11/2019

Approved by Manager of QC Brenda Teunissen

Do you have any questions or comments regarding this product? Please contact us via <a href="mailto:support@hycultbiotech.com">support@hycultbiotech.com</a>.

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