

## CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name S100A7, Human, clone 9F3

Catalog number HM2328

Lot number - Expiry date -

Volume 1 ml Amount 100 μg

Formulation 0.2 μm filtered in PBS+0.1%BSA Concentration 100 μg/ml

Host Species Mouse IgG1 Conjugate None

Endotoxin <24 EU/mg Purification Protein G

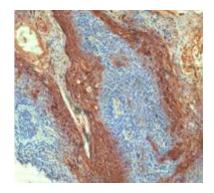
Storage 4°C

## **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

150 100



IHC-P:Paraffin embedded A431 tumor sections. The concentration HM2328 used was 5 µg/ml.

W: reduced western blot with recombinant S100A7 (1 and 10  $\mu$ g) shows bands at approximately 12, 26, 40, 47 and 75 kDa. Bands shown can be explained as multimers even though a reduced sample treatment was used. HM2328 was used in a concentration of 2  $\mu$ g/ml.

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 1:10.

- FS: Monoclonal antibody 9F3 block tumor cell proliferation induced by S100A7 in fibrosarcoma cell line HT1080.
- W: A reduced sample treatment and SDS-Page was used.
- IF: For Immuno fluorescence a concentration of 5µg/ml of HM2328 was used.
- Positive control: A431 tumors (Paraffin embedded sections); Negative control: MiaPACA-2 tumors (Paraffin embedded sections)

## **General Information**

## Description

Antibody 9F3 recognizes human S100A7 (Psoriasin). S100A7 is a 11.4kDa member of the S100 gene family, which are EF-hand Ca 2+-binding proteins. They are involved in a broad range of intra- and extracellular processes like regulation of calcium homeostasis, cell proliferation, differentiation, apoptosis, immune responses, antimicrobial activity, chemotaxis and inflammation. S100 proteins have a fundamental structural unit which is a highly integrated dimer, some as homodimer and others as heterodimer. S100A7 functions as a homodimer and binds two Zn2+ ions. These ions stabilize the dimer and mediate the function of S100A7 during infection. Extracellular S100A7 functions as a DAMP during infection. S100A7 limits bacterial infection through metal limitation. Furthermore, S100A7 interacts with RAGE which drives an NF-kB mediated proinflammatory response and recruitment of neutrophils. S100A7 was first discovered as a protein abundantly expressed in psoriatic keratinocytes. Possibly, S100A7 adheres directly to, and reduces survival of, pathogens found on the epidermis and acts as a physical barrier. S100A7 also seems to be involved with breast cancer and squamous cell carcinoma. In vitro it was found to confer a more aggressive behavior.

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Immunogen Full length recombinant human S100A7

Aliases Protein S100-A7, Psoriasin, S100 calcium-binding protein A7

Gene name: S100A7, PSOR1, S100A7C

**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.

Approved by Manager of QC Date
Robbert Zwinkels 16/03/2018

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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