

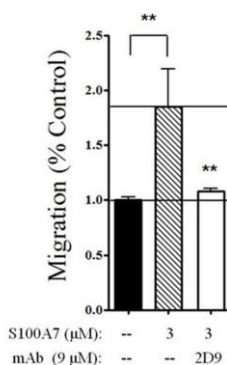
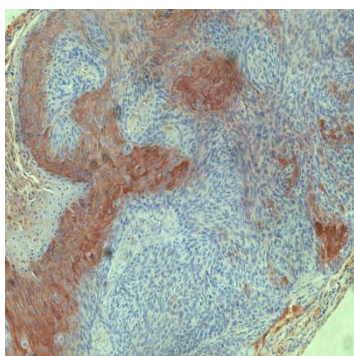
**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	S100A7, Human, clone 2D9		
<b>Catalog number</b>	HM2329		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	1 ml	<b>Amount</b>	100 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Mouse IgG1	<b>Conjugate</b>	None
<b>Endotoxin</b>	< 24 EU/mg	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #					1	1		1
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



IHC-P: staining of A431 tumor sections with antibody 2D9.

FS: Boyden Chamber MDA-MB-231 cell migration with antibody 2D9.

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 ~12 kDa.
- FS: Antibody clone 2D9 can be used as blocking antibody
- IA: Antibody 2D9 can be used as detection antibody.

**General Information**
**Description**

Antibody 2D9 recognizes human S100A7 (Psoriasin). S100A7 is a 11.4kDa member of the S100 gene family, which are EF-hand Ca<sup>2+</sup>-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 Zn<sup>2+</sup> 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-κB 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.

**Immunogen**

Full length human recombinant protein isolated from E.coli.

<b>Aliases</b>	Protein S100-A7, Psoriasin, S100 calcium-binding protein A7
<b>Gene</b>	Gene name: S100A7, PSOR1, S100A7C    Entrez Gene ID: <a href="#">6278</a> Uniprot: <a href="#">P31151</a>
<b>Cross reactivity</b>	Mouse: No; S100A2: No; S100A4: No; S100A8: No; S100A9: No; S100A11: No; S100P: No; S100B: No
<b>References</b>	1.    Padilla, L et al; S100A7: from mechanism to cancer therapy. Oncogene 2017, 36:6749
<b>Storage&amp;stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.
<b>Precautions</b>	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  
Robbert Zwinkels

Date  
16/03/2018

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).