

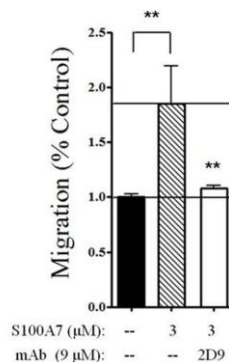
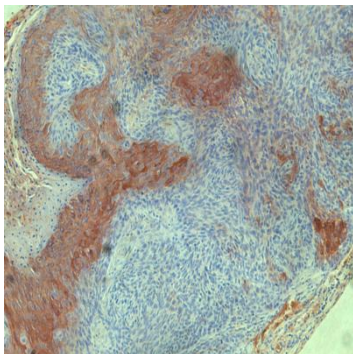
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	S100A7, Human, clone 2D9		
Catalog number	HM2329-20UG		
Lot number	-	Expiry date	-
Volume	200 µl	Amount	20 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 #					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 Ca²⁺-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-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.

Aliases	Protein S100-A7, Psoriasin, S100 calcium-binding protein A7
Gene	Gene name: S100A7, PSOR1, S100A7C Entrez Gene ID: 6278 Uniprot: P31151
Cross reactivity	Mouse: No; S100A2: No; S100A4: No; S100A8: No; S100A9: No; S100A11: No; S100P: No; S100B: No
References	1. Padilla, L et al; S100A7: from mechanism to cancer therapy. Oncogene 2017, 36:6749
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
Brenda Teunissen

Date
28/12/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.