

## CERTIFICATE OF ANALYSIS - TECHNICAL DATA SHEET

Product name S100A4, Human, clone 5A3

Catalog number HM2334

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

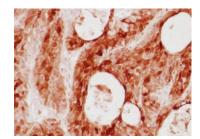
Endotoxin < 24 EU/mg Purification Protein G

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



IHC-P: staining of BxPC3 tumor sections with antibody 5A3.

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 5A3 can be used as blocking antibody

## **General Information**

## Description

The monoclonal antibody clone 5A3 recognizes S100A4. S100A4 is a member of the S100 family. To date, the family consists of 22 members. S100 proteins are low molecular weight calcium binding proteins. The proteins consist of 2 calcium binding EF-hands located on the termini flanked by hydrophobic hinge regions. Calcium ions acts as a global second messenger involved in the regulation of many aspects of cell function. S100 proteins are involved in sensing and transforming calcium signals to downstream cellular responses. S100 proteins are located in the cytoplasm and/or nucleus of a wide range of cell types and involved in the regulation of cellular processes such as cell cycle progression and differentiation and inflammatory responses. Several S100 members have been found to act as cytokines in inflammation, particularly in autoimmune skin conditions such as psoriasis. S100A4 may function in motility, invasion, and tubulin polymerization. Chromosomal rearrangements and altered S100A4 gene expression have been implicated in tumor metastasis. Studies have shown that S100A4 is involved tumor progression and metastasis in various malignant tumors. Detection of S100A4 expression becomes a promising candidate biomarker in cancer early diagnosis and prediction of cancer metastasis. Therefore S100A4 may have high therapeutic value.

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Immunogen Full length human recombinant protein isolated from E.coli.

Aliases Protein S100-A4, Calvasculin, Metastasin, Placental calcium-binding protein, Protein Mts1, S100 calcium-binding

protein A4

Gene Gene name: S100A4, CAPL, MTS1 Entrez Gene ID: 6275 Uniprot: P26447

Cross reactivity Cat: Yes

Dog: Yes Rabbit: Yes Sheep: Yes

**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 Robbert Zwinkels

Date 28/09/2018

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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