

10-10003: Monoclonal antibody to Hid-5/S100A7/Psoriasin (Clone: ABM18A5)

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| Clonality : | Monoclonal |
| Clone Name : | ABM18A5 |
| Application : | FACS, WB |
| Reactivity : | Human |
| Gene : | S100A7 |
| Gene ID : | 6278 |
| Uniprot ID : | P31151 |
| Format : | Purified |
| Alternative Name : | S100A7, PSOR1, S100A7C |
| Isotype : | Mouse IgG1 Kappa |
| Immunogen Information : | A partial length recombinant human psoriasin/HID-5 protein was used as the immunogen for this antibody. |

Description

Psoriasin (S100A7) is a protein of low molecular weight that belongs to the S100 protein family, which are EF-hand calcium-binding proteins. Originally identified in psoriasis, Psoriasin functions as a transglutaminase substrate/cornified envelope precursor, signal transduction protein, chemokine, and antibacterial protein in normal epidermis. Psoriasin is upregulated in primary keratinocytes and is a major player in the local innate defense of healthy skin against bacteria. Furthermore, it plays a role in wound healing, a pathophysiological process associated with inflammation and involving its release by keratinocytes into wound fluid. It has been found to kill by sequestering trace elements, such as zinc, and by directly permeabilizing bacterial cell membranes. In the intracellular compartment, S100A7 appears to interact with epidermal fatty acid-binding protein (E-FABP). S100A7 is also found in the extracellular environment. It is reported to be found in psoriatic plaque exudate, as is its binding partner E-FABP. In addition, S100A7 may be released from cultured keratinocytes, and it may act as a chemotactic agent, a function that has been reported for S100A7 in non-epidermal tissues. Psoriasin is over-expressed in abnormal conditions like epidermal hyperproliferative disorders, which share the following features: cellular and vascular hyperproliferation, abnormal differentiation and lymphocytic infiltration. In high-grade ductal carcinoma in situ, Psoriasin was identified as one of the most abundant transcripts. Psoriasin is induced by reactive oxygen species (ROS) and the downregulation of psoriasin by short hairpin RNA (shRNA) leads to reduced expression of vascular endothelial growth factor (VEGF) and inhibits tumor growth in vivo. Psoriasin may also play a role in breast cancer progression by promoting oxidative stress response and angiogenesis.

Product Info

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| Amount : | 25 µg / 100 µg |
| Purification : | Protein G Chromatography |
| Content : | 25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic. |
| Storage condition : | Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles. |

Application Note

Western blot analysis: 2-4 µg/ml; FACS Analysis: 0.5-1 µg/10⁶ cells

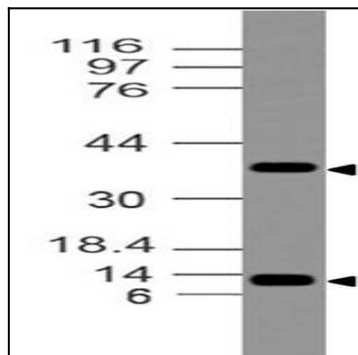


Fig:1- Expression analysis of S100A7/Psoriasin. Anti-S100A7 antibody (Clone: ABM18A5) was tested at 2 µg/ml on BT-474 lysate.

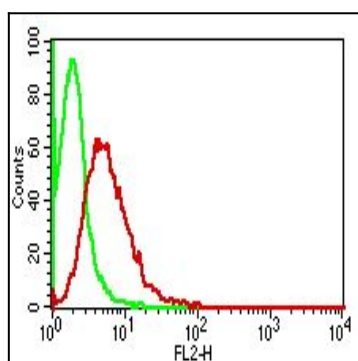


Fig:2- Intracellular Flow analysis of S100A7/Psoriasin antibody in A431 cells using 0.5 µg/ 10⁶ cells of anti-S100A7 antibody (ABM18A5). Green represents isotype control; red represents anti-S100A7 antibody. Goat anti-mouse PE conjugate was used as secondary antibody.