

36-3121: Anti-S100A4 / Metastasin / Calvasculin (Marker of Tumor Metastasis) Monoclonal Antibody(Clone: CPTC-S100A4-3)

Clonality :	Monoclonal
Clone Name :	CPTC-S100A4-3
Application :	FACS,WB,IF
Reactivity :	Human
Gene :	S100A4
Gene ID :	6275
Uniprot ID :	P26447
Alternative Name :	S100 calcium-binding protein A4; Calvasculin; CAPL; Fibroblast specific protein 1 (FSP1); Leukemia multidr μ g resistance associated protein; Malignant transformation suppression 1 (MTS1); Metastasin; Placental calcium-binding protein
Isotype :	Mouse IgG2c, kappa
Immunogen Information :	Recombinant human S100A4 full length protein

Description

S100A4 belongs to the S100 super-family of proteins containing 2 EF-hand calcium-binding domains. S100A4 has been implicated in the progression and prognosis of several forms of human cancer, e.g. breast, colorectal, gastric, pancreatic and bladder cancer, SCLC and oesophageal squamous cell carcinoma, among others. Poor prognosis associated with high S100A4 expression is accompanied by clear signs of disease progression, e.g. high histological and clinical grades and involvement of lymph nodes. Also indicative of poor prognosis is high S100A4 expression coupled with reduced E-cadherin expression in pancreatic, oral squamous cell carcinoma and in melanoma. S100A4 expression is inversely related with expression of metastasis suppressor nm23 and with prognosis of breast cancer. S100A4 is overexpressed in highly metastatic cancers, which makes it useful as a marker of tumor progression.

Product Info

Amount :	20 μ g / 100 μ g
Content :	200 μ g/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Flow Cytometry (1-2 μ g/million cells); Immunofluorescence (1-2 μ g/ml); Western Blot (1-2 μ g/ml);

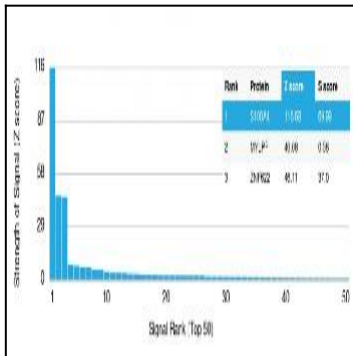


Fig. 1: Analysis of Protein Array containing more than 19,000 full-length human proteins using S100A4 Mouse Monoclonal Antibody (CPTC-S100A4-3). Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

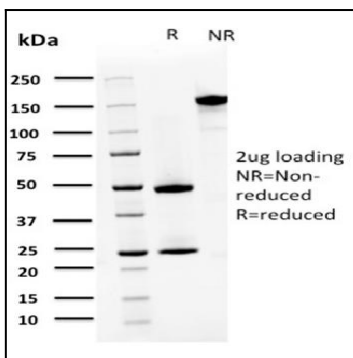


Fig. 2: SDS-PAGE Analysis Purified S100A4 Mouse Monoclonal Antibody (CPTC-S100A4-3). Confirmation of Purity and Integrity of Antibody

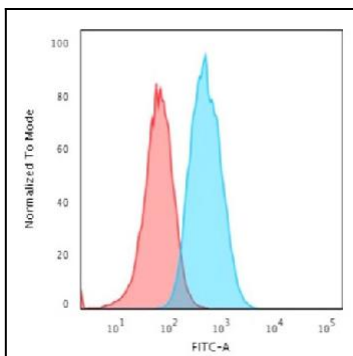


Fig. 3: Flow Cytometric Analysis of T98G cells using S100A4 Mouse Monoclonal Antibody (CPTC-S100A4-3) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

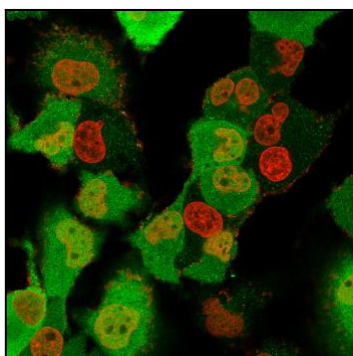


Fig. 4: Immunofluorescence Analysis of T98G cells labeling S100A4 with S100A4 Mouse Monoclonal Antibody (CPTC-S100A4-3) followed by Goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Reddot (Red).

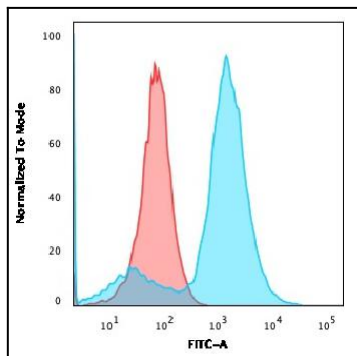


Fig. 5: Flow Cytometric Analysis of A549 cells using S100A4 Mouse Monoclonal Antibody (CPTC-S100A4-3) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).