



Cat nr AE00151

Product Datasheet

Mouse Monoclonal Antibody, clone S100A4/1481 to:

S100A4, S100 calcium binding protein A4

Calvasculin; Metastasin; Placental calcium-binding protein; Protein Mts1; Protein S100-A4; S100 calcium binding protein A4; S100 calcium-binding protein A4; 18A2; 42A; CAPL; FSP1; MTS1; P9KA;

Cellular localization Nucleus, exosomes and secreted

Official Symbol (Gene) S100A4

GenelD 6275

SwissProt P26447

Confirmed Applications ICC, IHC, PA, WB
Positive controls HeLa, A549, A375, placenta

Aeonian Rating© 80

Purification By Protein G from bioreactor concentrate

Formulation 200ug IgG/ml in PBS, 0.05% BSA, 0.05% azide (20ug or 100ug)
 1mg IgG/ml in PBS (100ug or contact us for quotation)

Amount 20ug 100ug

Isotype Mouse IgG1, kappa

Confirmed species reactivity Human

Immunogen Recombinant fragment of human S100A4 protein (exact sequence is proprietary)

Epitope Unknown

Storage instructions Avoid repeated freeze/thaw cycles. For long term storage, keep small aliquots at -20C or -80C and keep one aliquot at 4C for daily experimentations. Azide will preserve antibody at 4C for 6-12 months, when kept away from direct sun light.

Expiration Integrity warranted for 24 months after purchase when handled and stored according to instructions, see below.

Warranty This product is only warranted for the specifications as described in this product sheet and only when the product is handled and stored according to instructions. User should validate this antibody in the application and tissue/cell type as required, after confirmation of integrity upon receipt is obtained by reproducing the performance as described below. Should such confirmation not be attempted, any warranty is void. In case of non-conformance, user needs to contact us immediately for replacement or refund.

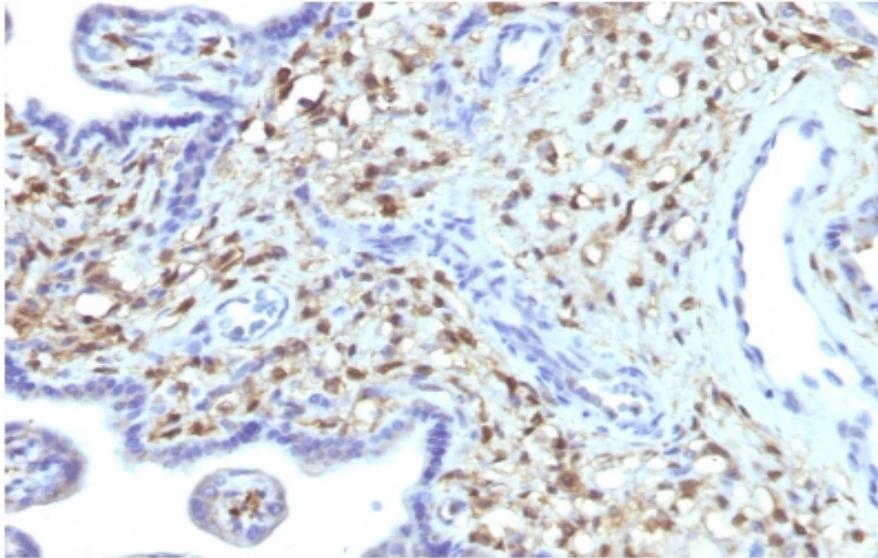
Liability This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.

Product performance see next pages

Product data:

ImmunoHistoChemistry (IHC):

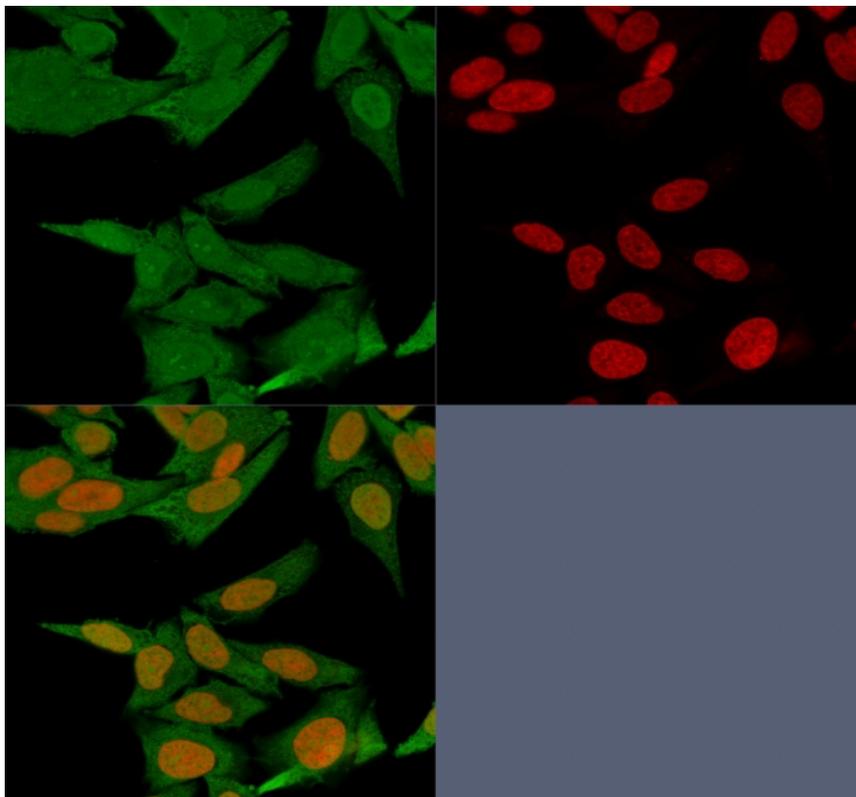
This product shows nuclear staining in human placenta sections. Recommended concentration: 0.3-1ug/ml



Formaldehyde-fixed, paraffin-embedded human placenta stained with S100A4 Mouse Monoclonal Antibody AE00151 at 0.3-0.5ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.

ImmunoCytoChemistry (ICC):

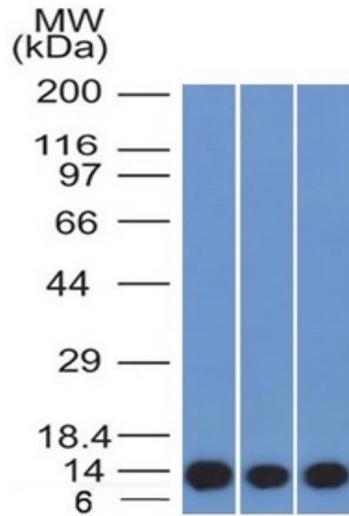
This product was successfully used to stain nuclei, and to a lesser extent also cytoplasm in HeLa. Recommended concentration: 1-3ug/ml



HeLa cells stained with S100A Mouse Monoclonal Antibody AE00151 at 1-2ug/ml for 1h at RT. Detection by confocal microscopy using CF488 (green) for the antibody and RedDot (red) for nuclear staining.

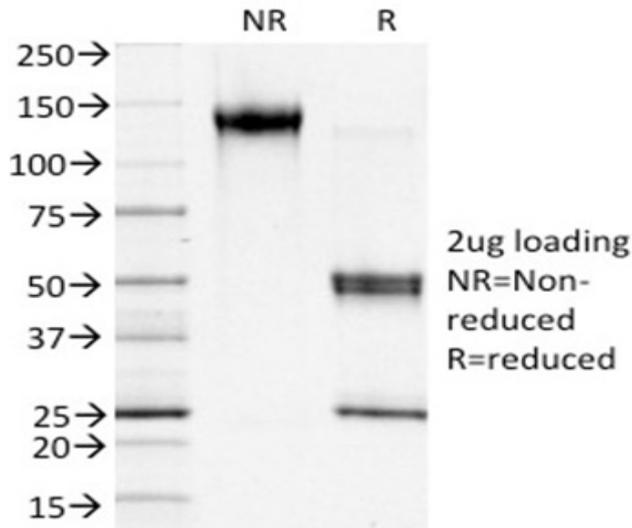
Western Blot (WB):

This product was successfully used to stain an approx. 12kDa band in lysates of cell lines HeLa, A549 and A375. Recommended concentration: 0.5-1.5ug/ml



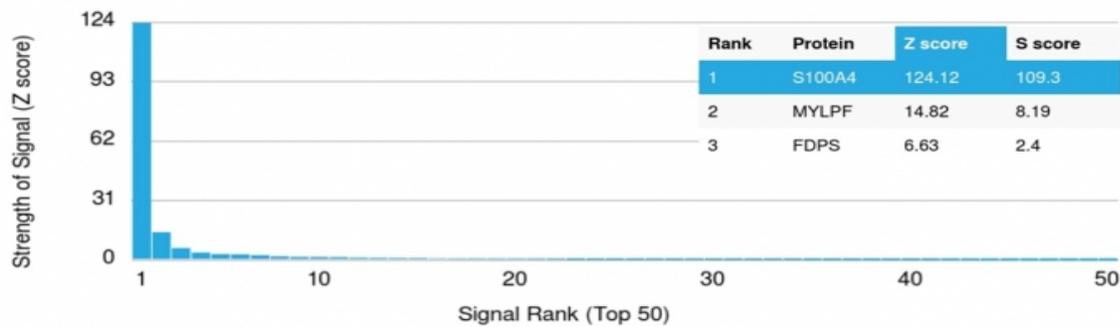
Western Blot of a HeLa, A549 and A375 lysates (30ug) stained with S100A4 Mouse Monoclonal Antibody AE00151 at 1ug/ml (1h at ambient temp). ECL staining by HRP.

SDS-PAGE Analysis of Purified S100A4 Mouse Monoclonal Antibody AE00151. Confirmation of Purity and Integrity of Antibody.



Integrity of the purified antibody AE00132 under non-reduced and reduced conditions, showing intact IgG at around 140kDa (NR) and intact heavy and light chains at 50kDa and 25kDa resp. (R).

Specificity and selectivity of AE00151 to S100A4 were tested against >19,000 full-length human proteins on a human protein array. A protein BLAST search against *H. sapiens* revealed the following closely related proteins S100A1, 2, 3 and 6. These proteins were part of the array used and showed no cross-reactivity signals.



Cross-reactivity assessment of S100A4 Mouse Monoclonal Antibody AE00151 (1ug/ml) on CDI's Protein Array containing more than 19,000 full-length human proteins.

The Z-score represents the strength of a signal that an antibody (through a fluorophore-tagged secondary reagent) produces when binding to a particular protein on the array. Z-scores are in units of standard deviations (SD's) above the mean value of all signals generated on that array. When Z-scores are arranged in descending order, the difference between two successive values will be the S-score for the first. Thus, the S-score represents the relative specificity of the antibody to its intended target. An antibody is considered specific to its intended target, when it has an S-score of at least 2.5. For example, if an antibody binds to intended protein X with a Z-score of 43 and to the cross-reacting protein Y with a next Z-score of 14, then the S-score for the antibody to intended target X equals 29 (43-14).