



## Cat nr AE00150

## Product Datasheet

Mouse Monoclonal Antibody, clone EGP40/1372 to:

### EpCAM, Epithelial Cell Adhesion Molecule

Adenocarcinoma-associated antigen; Cell surface glycoprotein Trop-1; Epithelial Cell Adhesion Molecule; Epithelial cell surface antigen; Epithelial glycoprotein 314; Major gastrointestinal tumor-associated protein GA733-2; Tumor-associated calcium signal transducer 1; CD326; DIAR5; EGP; EGP-2; EGP314; EGP40; Ep-CAM; ESA; hEGP314; HNPCC8; KS1/4; KS 1/4 antigen; KSA; M4S1; MIC18; MK-1; TACSTD1; TROP1

Cellular localization Plasma membrane, cell surface

Official Symbol (Gene) EPCAM  
GenelD 4072  
SwissProt P16422

Confirmed Applications ICC, IHC, PA, WB  
Positive controls A431, HCT116, HEK293, MCF7, carcinomas, lung

Aeonian Rating© 82

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  
Confirmed species reactivity Human  
Immunogen Recombinant human EpCAM protein fragment aa 77-202 (exact sequence is proprietary)  
Epitope Extracellular domain within aa 77-202

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.

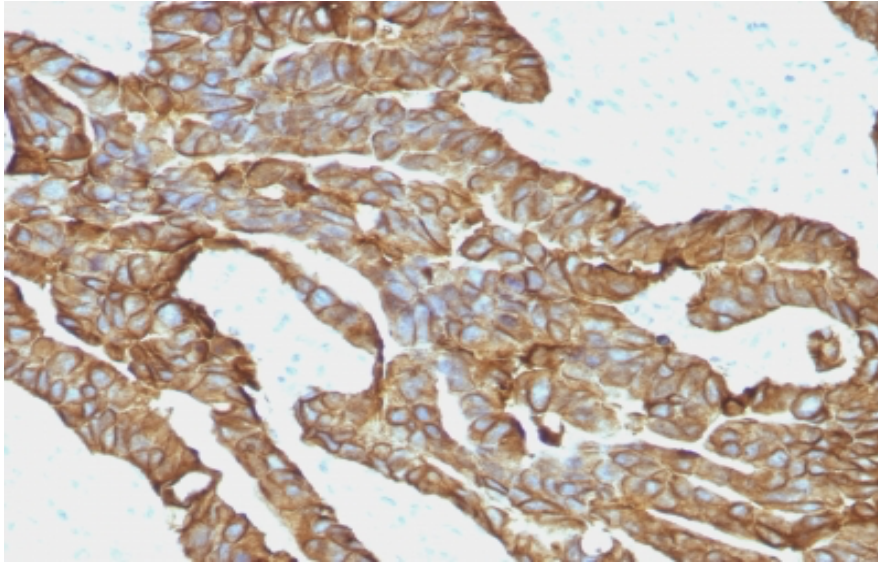
Liability This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.

Product performance see next pages

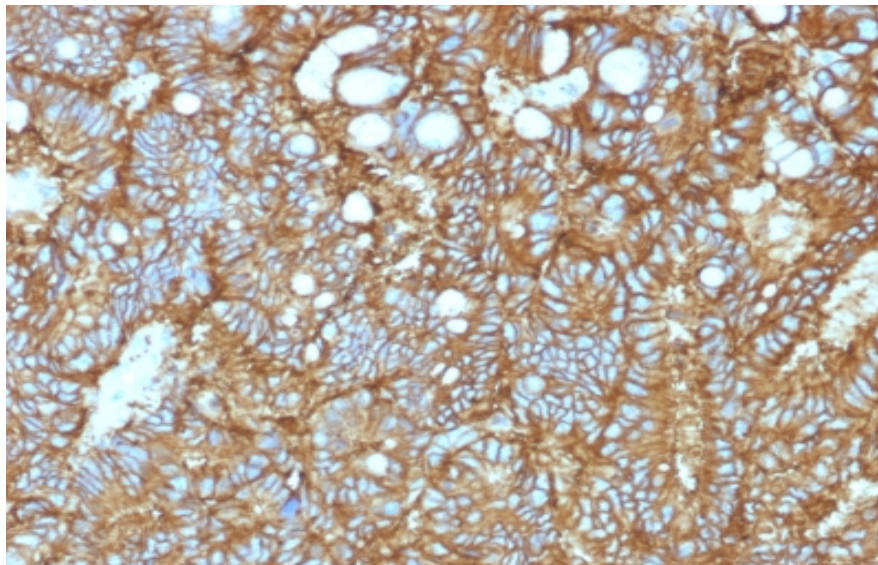
**Product data:**

**ImmunoHistoChemistry (IHC):**

This product was successfully used to stain cellular membranes in human colorectal and hepatocellular carcinoma sections. Recommended concentration: 0.3-1ug/ml



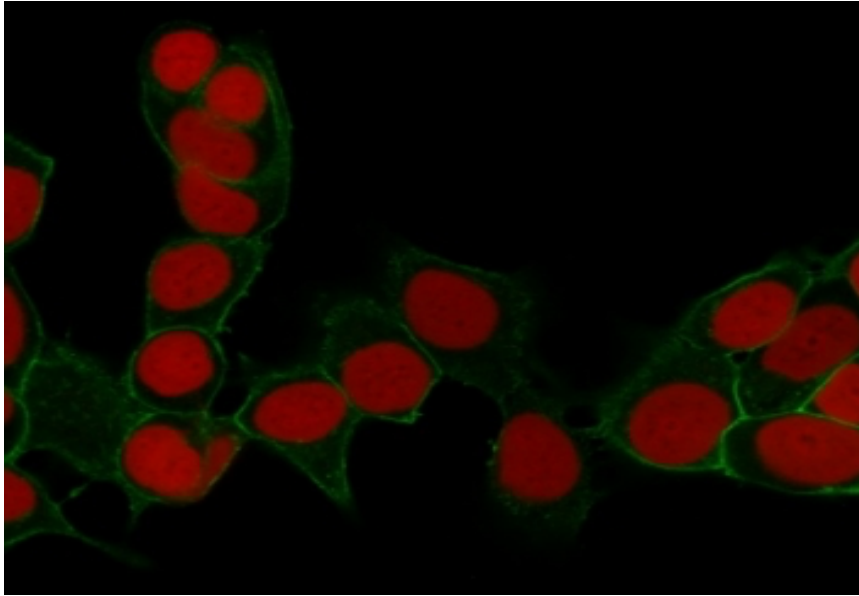
Formaldehyde-fixed, paraffin-embedded human colorectal carcinoma stained with EpCAM Mouse Monoclonal Antibody AE00150 at 0.5-1ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.



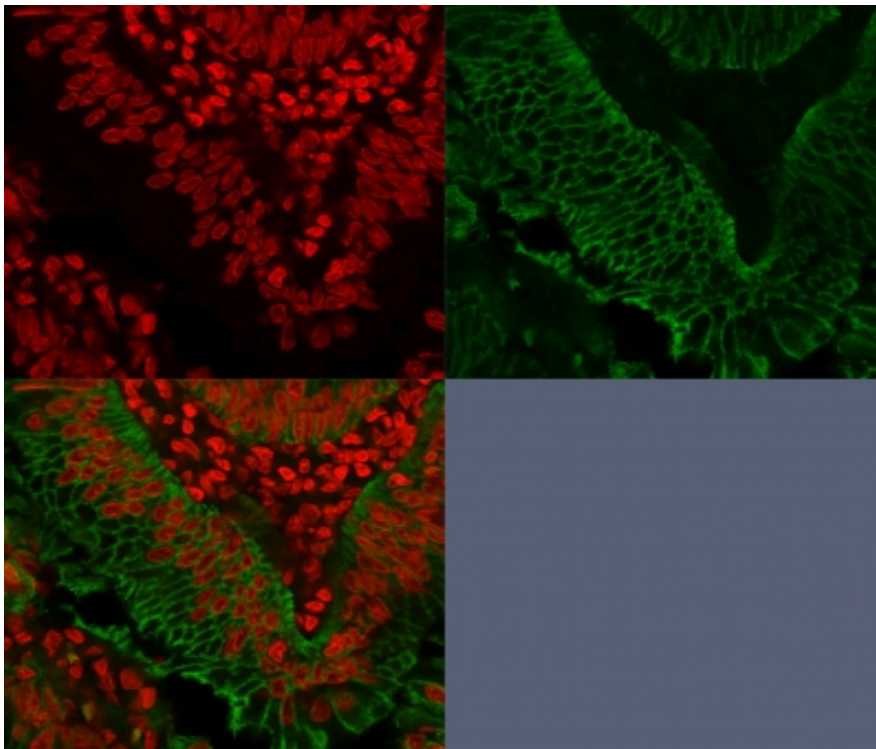
Formaldehyde-fixed, paraffin-embedded human hepatocellular carcinoma stained with EpCAM Mouse Monoclonal Antibody AE00150 at 0.5-1ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.

ImmunoCytoChemistry (ICC):

This product was successfully used to stain cellular membranes in cell line MCF7 and in colorectal carcinoma. Recommended concentration: 1-3ug/ml



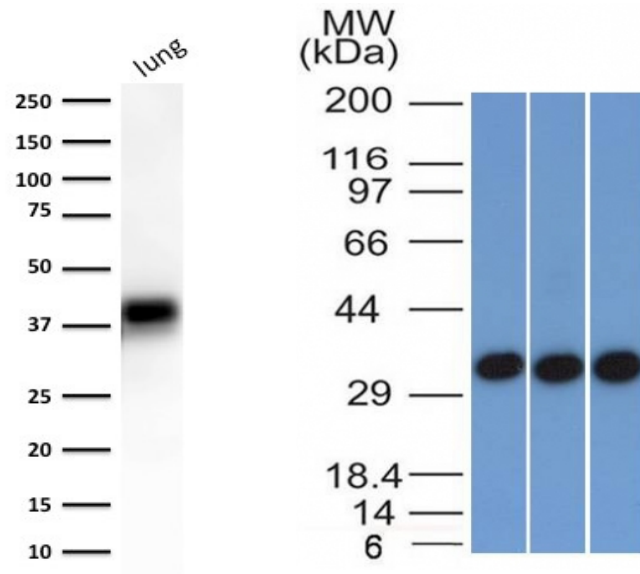
Confocal microscopy of cell line MCF7 stained with EpCAM Mouse Monoclonal Antibody AE00150 at 1-2ug/ml for 30 minutes at RT. CF488 (green) staining for the antibody and RedDot (red) for nuclear staining.



Confocal microscopy of colorectal carcinoma stained with EpCAM Mouse Monoclonal Antibody AE00150 at 1-2ug/ml for 30 minutes at RT. CF488 (green) staining for the antibody and RedDot (red) for nuclear staining.

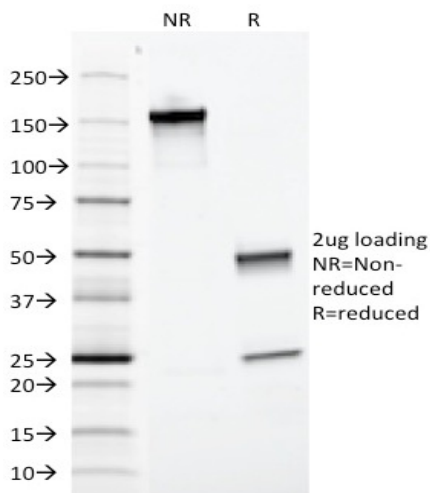
**Western Blot (WB):**

This product was successfully used to stain an approx. 40kDa band in human lung lysates and approx. 35kDa in lysates of cell lines HEK293, A431 and HCT116. Recommended concentration: 0.5-1.5ug/ml



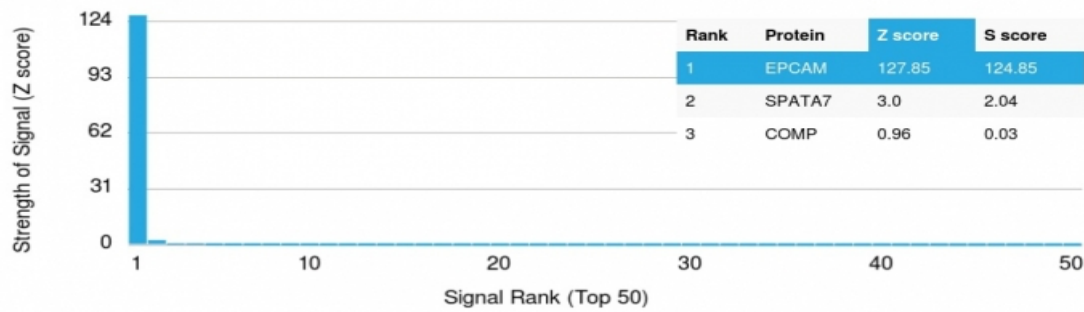
Western Blot of human lung lysate (30ug) on the left and of lysates of cell lines HEK293, A431 and HCT116 (30ug) on the right stained with EpCAM Mouse Monoclonal Antibody AE00150 at 1ug/ml (1h at ambient temp). ECL staining by HRP.

**SDS-PAGE Analysis of Purified EpCAM Mouse Monoclonal Antibody AE00150. Confirmation of Purity and Integrity of Antibody.**



Integrity of the purified antibody AE00150 under non-reduced and reduced conditions, showing intact IgG at around 160kDa (NR) and intact heavy and light chains at 50kDa and 25kDa resp. (R).

Specificity and selectivity of AE00150 to EpCAM 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 other protein: TROP2. This protein was part of the array used and showed no cross-reactivity signals.



Cross-reactivity assessment of EpCAM Mouse Monoclonal Antibody AE00150 (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).