# Product datasheet

## anti-EP-CAM mouse monoclonal, HEA125, liquid, purified

### Short overview

| | |
|---|---|
| **Cat. No.** | 690004 |
| **Quantity** | 1 ml (50 µg/ml) |
| **Concentration** | 50 µg/ml (50 µg) |

### Product description

| | |
|---|---|
| **Host** | Mouse |
| **Antibody Type** | Monoclonal |
| **Isotype** | IgG1 |
| **Clone** | HEA125 |
| **Immunogen** | HT-29 colon carcinoma cell line |
| **Formulation** | PBS buffer, pH 7.4 with 0.09% sodium azide and 0.5% BSA |
| **Synomym** | Human Epithelium Antigen, HEA, 17-1A, EPG34, CD326, TACSTD1 |
| **Conjugate** | Unconjugated |
| **Purification** | Affinity chromatography |
| **Storage** | Short term at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles |
| **Intended use** | Research use only |
| **Application** | ICC/IF, IHC, WB |
| **Reactivity** | Human |
| **No reactivity** | Mouse |

### Applications

| | |
|---|---|
| **Immunocytochemistry (ICC)** | Assay dependent |
| **Immunohistochemistry (IHC) - frozen** | 1:10-1:50 (1-5 µg/ml) |
| **Immunohistochemistry (IHC) - paraffin** | 1:10-1:50 (1-5 µg/ml; protease treatment recommended) |
| **Western Blot (WB)** | 1:200-1:3.000 (0.02-0.25 µg/ml) |

### Background

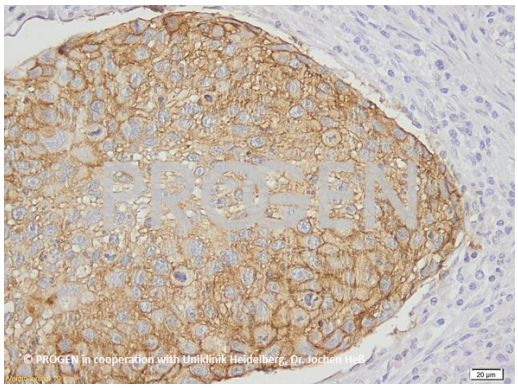
The Ep-CAM (HEA125) antibody recognizes the epithelial cell adhesion molecule Ep-CAM (also described as 17-1A antigen, EPG34, CD326, and TACSTD1). This antigen is widely expressed on cells of epithelial origin and tumors derived therefrom. HEA125 represents an excellent marker to discriminate epithelial from mesothelial structures. The antigen has been detected in all carcinoma types tested (18 different origins). A subset of squamous cell carcinoma is negative.

The antibody can be used as alternative to the anti-EpCAM antibody clone BerEp4.

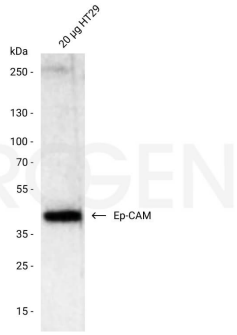
Polypeptide reacting: Mr 40,000 human epithelium-specific cell surface glycoprotein (Ep-CAM).

Reactivity on cultured cell lines: all carcinoma cell lines tested so far; particularly strong reaction with colon carcinoma cell lines.

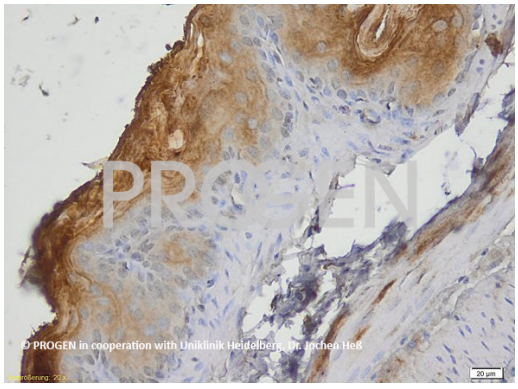
## Product images




Human head and neck squamous-cell carcinoma (HNSCC)(courtesy of J.Heß, University Hospital Heidelberg)




Western blot analysis of human HT29 cell lysate with anti-Ep-CAM antibody. Western blot analysis was performed on 20 µg of HT29 lysate. Cells were lysed with RIPA buffer. The PVDF membrane was blocked with 5% dry milk in PBST (PBS + 0.1% Tween 20) for 1 h at RT. The primary antibody anti-EP-CAM mouse monoclonal, HEA125 (Cat. No. 690004) was diluted in blocking buffer (antibody concentration 0.025 µg/ml) and incubated for 1 h at RT. The secondary antibody anti-mouse IgG goat polyclonal, HRP conjugate was also diluted in blocking buffer (antibody concentration 0.2 µg/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using PierceTM ECL Western Blotting Substrate.




Mouse stomach (courtesy of J.Heß, University Hospital Heidelberg)

## References

| Publication | Species | Application |
|---|---|---|
| Wilkinson A. L. et al., The senescent secretome drives PLVAP expression in cultured human hepatic endothelial cells to promote monocyte transmigration., iScience, 26, 107966, (2023). | Human | MACS |
| Metzgeroth, G., Kuhn, C., Schultheis, B., Hehlmann, R. & Hastka, J. Diagnostic accuracy of cytology and immunocytology in carcinomatous effusions. Cytopathology 19, 205-211 (2008). | human | ICC |
| Momburg, F., Moldenhauer, G., HÃ¤mmerling, G. J. & MÃ¼ller, P. Immunohistochemical study of the expression of a Mr 34,000 human epithelium-specific surface glycoprotein in normal and malignant tissues. Cancer Res. 47, 2883-91 (1987). | human | IHC (frozen) |
| Joplin, R., Strain, A. J. & Neuberger, J. M. Immuno-isolation and culture of biliary epithelial cells from normal human liver. In Vitro Cell. Dev. Biol. 25, 1189-92 (1989). | human | IHC (frozen) |
| Domke, L and Franke, W. The cell-cell junctions of mammalian testes.., Cell Tissue Res, 375, 451-482, (2019) | pig | ICC-IF |