Epithelial Specific Antigen / Ep-CAM Ab-3 (Clone 323/A3)
Mouse Monoclonal Antibody
Cat. #MS-181-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)
Cat. #MS-181-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)
Cat. #MS-181-PCS (5 Slides) (Positive Control for Histology)

**Description:** EGP40 is a 40kDa transmembrane epithelial glycoprotein, also identified as epithelial specific antigen (ESA), or epithelial cellular adhesion molecule (Ep-CAM). It is expressed on baso-lateral cell surface in most simple epithelia and a vast majority of carcinomas. It reportedly distinguishes adenocarcinomas from pleural mesotheliomas.

**Comments:** Also detected by other Ab’s e.g. VU-1D9 (NeoMarkers’ Cat. No. MS-144-P), AUA1 (NeoMarkers’ Cat No. MS-675-P), ESA43 (NeoMarkers’ Cat. No. MS-1245-P) 17-1A, KS1/4, Ber-EP4, MOC-31, GA733, & HEA 125.

**Mol. Wt. of Antigen:** 40-43kDa

**Epitope:** Not determined

**Species Reactivity:** Human. Does not react with rat. Others-not known.

**Clone Designation:** 323/A3

**Ig Isotype:** IgG1

**Immunogen:** MCF-7 human breast cancer cells

**Applications and Suggested Dilutions:**
- Flow Cytometry
- Immunofluorescence
- Radioimaging
- Immunohistology (Formalin/paraffin) (Ab 1-2µg/ml for 30 min at RT)

* [Staining of formalin/paraffin tissues REQUIRES digestion of tissue sections with pepsin at 1mg/ml Tris-HCl, pH 2.0 for 15 min at RT or 10 min at 37°C (Cat. #AP-9007)]

The optimal dilution for a specific application should be determined by the investigator.

**Positive Control:** Breast carcinoma

**Cellular Localization:** Cell membrane

**Storage and Stability:** Ab with sodium azide is stable for 24 months when stored at below 0°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

**Supplied As:** 200µg/ml antibody purified from the ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.

**Key References:**

**Limitations and Warranty:**
Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

**Material Safety Data:**
This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

**For Research Use Only Additional Key References:**
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3. Bergsagel PL; Victor-Kobrin C; Timblin CR; Trepel J; Kuehl WM. A murine cDNA encodes a pan-epithelial glycoprotein that is also expressed on plasma cells. J of Immunology, 1992, 148(2):590-6.
6. Langmuir VK; Mendonca HL; Woo DV. Comparisons between two monoclonal antibodies that bind to the same antigen but have differing affinities: uptake kinetics and 125I-antibody therapy efficacy in multicell spheroids. Cancer Research, 1992, 52(17):4728-34.
11. Khaw BA; Bailes JS; Schneider SL; Lancaster J; Powers J; Strauss HW; Lasher JC; McGuire WL. Human breast tumor imaging using 111In labeled monoclonal antibody: athymic mouse model. Eur J of Nuclear Medicine, 1988, 14(7-8):362-6.
13. Edwards DP; Grzyb KT; Dressler LG; Mansel RE; Zaza DT; Sledge GW Jr; McGuire WL. Monoclonal antibody identification and characterization of a Mr 43,000 membrane glycoprotein associated with human breast cancer. Cancer Research, 1986, 46(3):1306-17.