



Rev: A

Release Date: 04/13/2014

IVD

EMA- E29

Clone	E29
Source	Mouse Monoclonal
Cat #	PM107-6ml RTU PM107-3ml RTU CM107-0.1ml Conc CM107-0.5ml conc
Regulatory Status	IVD

Intended Use:

This antibody is intended for use to qualitatively identify Cytokeratin 8 and 18 by light microscopy in formalin fixed, paraffin embedded tissue sections using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient's clinical history and other diagnostic tests. A qualified pathologist must perform evaluation of the test.

Summary and Explanation:

Epithelial membrane antigen (EMA), or CA15-3, or polymorphic epithelial mucin (PEM), or sialomucin, or episialin is a mucin-like glycoprotein. Antibody to EMA has been shown useful as a pan- epithelial marker for detecting early metastatic loci of carcinoma in the bone marrow or liver.

Immunogen: Delipidated extract of human milk fat globule membranes

Isotype: Mouse IgG2/k

Reagent Provided:

Concentrated format: Antibody to EMA is diluted in antibody diluent, with 1% bovine serum albumin (BSA) and 0.05% sodium azide (NaN₃). Recommended dilutions: 1:50 – 1:100. The antibody dilution and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by individual laboratory.

Pre-diluted format: PathnSitu ready to use antibodies are pre tittered to optimal staining conditions. Further dilution may loose the activity and may yield to sub optimal staining.

Storage Recommendations: Store at 2°-8°C. Do not use after expiration date provided on the vial.

Staining Recommendations:

Antigen Retrieval Solution: Use **CitrateBuffer(PathnSitu Cat # PS007)** as antigen retrieval solution
Heat Retrieval Method: Retrieve sections under steam pressure for 15 min using PathnSitu's MERS (Multi Epitope Retrieval System) then allow solution to cool for 10 minutes then transfer tissue sections/slides to distilled water.

Primary Antibody: Cover the tissue sections with primary antibody and incubate for 30 min at room temperature when used PathnSitu PolyExcel Detection System.

Detection System: Refer to PathnSitu PolyExcel detection system protocol or manufacturer's detection kit staining protocol when used other vendor detection system.

Cellular Localization: Membrane and Cytoplasm

Positive Control: Breast, Breast ductal Ca, Mesothelioma

Troubleshooting: Follow the antibody specific protocol recommendations according to data sheet provided. If unusual results occur, contact PathnSitu Technical Support at 040-2701 5544 or techsupport@pathnsitu.com.

Limitations and Warranty: There are no warranties, expressed or implied, which extend beyond this description. PathnSitu is not liable for property damage, personal injury, or economic loss caused by this product.

Bibliography:

- 1.Cordell J, Richardson TC, Pulford KAF, Ghosh AK, Gatter KC, Heyderman E, et al. Production of monoclonal antibodies against human epithelial membrane antigen for use in diagnostic immunocytochemistry. Br J Cancer 1985;52:347 - 54.
2. Swanson PE. Monoclonal antibodies to human milk fat globule proteins. In: Wick MR, Siegal GP, editors. Monoclonal antibodies in diagnostic immunohistochemistry. New York – Basel: Marcell Dekker Inc; 1988. p. 227-83.
3. Sloane JP, Ormerod MG. Distribution of epithelial membrane antigen in normal and neoplastic tissues and its value in diagnostic tumor pathology. Cancer 1981;47:1786-95.
4. Heyderman E, Strudley I, Powell G, Richardson TC, Cordell JL, Mason DY. A new monoclonal antibody to epithelial membrane antigen (EMA) – E29.A comparison of its immunocytochemical reactivity with polyclonal anti-EMA antibodies and with another monoclonal antibody, HMFG-2. Br J Cancer 1985;52:355-61.
5. Pinkus GS, Kurtin PJ. Epithelial membrane antigen – a diagnostic discriminant in surgical pathology. Immunohistochemical profile in epithelial, mesenchymal, and hematopoietic neoplasms using paraffin sections and monoclonal antibodies. Hum Pathol 1985;16:929- 40.