Anti– human EMA Mouse Monoclonal Antibody

Clone: UMAB41 REF RU00052

Intended use

Anti- human Epithelial Membrane Antigen (EMA) (Clone: UMAB41) Mouse Monoclonal Antibody is intended for research use only. Not for use in diagnostic procedures. Not for human or animal consumption.

Background

EMA is a membrane-bound protein that is a member of the mucin family. Mucins are O-glycosylated proteins that play an essential role in forming protective mucous barriers on epithelial surfaces. These proteins also play a role in intracellular signaling. This protein is expressed on the apical surface of epithelial cells that line the mucosal surfaces of many different tissues including lung, breast stomach and pancreas. This protein is proteolytically cleaved into alpha and beta subunits that form a heterodimeric complex. The N-terminal alpha subunit functions in cell-adhesion and the C-terminal beta subunit is involved in cell signaling. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas. This gene is known to contain a highly polymorphic variable number tandem repeats (VNTR) domain. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Feb 2011].

Alternative names: MUC-1

Reagent provided

Anti-human EMA Mouse Monoclonal Primary Antibody (Clone: UMAB41) is provided in liquid form in 20mM Sodium phosphate, 150mM Sodium chloride, 0.2% BSA, 0.09% Sodium azide, pH 7.4. The isotype of the antibody is IgG1. The protein concentration is approximately 0.8 +/ - 0.05 mg/mL.

For immunohistochemistry, the primary antibody may be used at a working dilution of 1:100 – 1:200 for formalin-fixed, paraffin-embedded human tissue. It can be dependent upon the detection system used. These are guidelines only, and optimal dilutions should be determined by the individual laboratory.

Immunogen

Full length human recombinant protein of human MUC1 (NP_001018016) was produced in HEK293T cell.

Specificity

The specificity of the anti- human EMA Mouse Monoclonal Primary Antibody was established on known positive colon and stomach cancer. The anti-human EMA presented no staining on formalin fixed, human spleen and positive staining on formalin fixed colon and stomach cancer, using immunohistochemical (IHC) test methods.

Precautions

1. This product contains sodium azide (NaN_3), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, NaN_3 may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
2. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
3. Unused reagents should be disposed of according to local, State, and Federal regulations.
4. Suitability for specific application may vary and it is the responsibility of the end user to determine the appropriate application for use and stability.

Storage

Store at 2-8°C. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user.

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