Anti– human EpCAM Mouse Monoclonal Primary Antibody

Clone: UMAB131

**CATALOG NUMBER**

- C0016MA01-MA 0.1 mL
- C0016MA05-MA 0.5 mL
- C0016MA10-MA 1.0 mL

**ENGLISH**

**Intended use**
Anti- human EPCAM Mouse Monoclonal Primary Antibody is intended for the detection of EPCAM protein expression in frozen or formalin fixed human tissues and cells. The clinical interpretation of any positive staining or its absence should be complemented by morphological and histological studies with proper controls. Evaluations should be made within the context of the patient’s clinical history and other diagnostic tests by a qualified pathologist. The antibody is intended for *in vitro* diagnostic (IVD) use.

**Background**
EpCAM is a carcinoma-associated antigen and is a member of a family that includes at least two type I membrane proteins. This antigen is expressed on most normal epithelial cells and gastrointestinal carcinomas and functions as a homotypic calcium-independent cell adhesion molecule. The antigen is being used as a target for immunotherapy treatment of human carcinomas. Mutations in this gene result in congenital tufting enteropathy.

Alternative names: EpCAM/ epithelial cell adhesion molecule, CD326, MOC31, TACSTD1 protein

**Reagent provided**
Anti- human EPCAM Mouse Monoclonal Primary Antibody (Clone: UMAB131) is provided in liquid form in 20mM Sodium phosphate, 150mM Sodium chloride, 0.09% Sodium azide, pH 7.4. The isotype of the antibody is IgG1. The total protein concentration is 0.1 +/- 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 tissues, and this can be dependent upon the detection system used. These are guidelines only, and the optimal dilutions should be determined by the individual laboratory.
Immunogen
Full length human recombinant protein of human EPCAM(NP_002345) produced in HEK293T cell.

Specificity
The specificity of the anti-human EpCAM Mouse Monoclonal Primary Antibody was established on known positive human colon cancer and negative normal human lung and tonsil tissue. The anti-EpCAM presented no staining on formalin fixed negative lung and tonsil tissue and positive staining on formalin fixed positive human colon cancer tissue using immunohistochemical (IHC) test methods.

Materials Required but Not Supplied
Antibody diluent, HIER solution, Antibody detection kits, Chromogen, Staining reagents, negative and positive tissue control slides are not included.

Precautions
1. For use by trained professionals only.
2. This product contains sodium azide (NaN₃), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, NaN₃ 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.
3. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
4. Unused reagents should be disposed of according to local, State, and Federal regulations.

Storage
Store at 2-8°C. Do not use the product past the expiration date indicated on the label. If reagents are stored under any other conditions, the end user must verify the acceptability of those conditions. There are no obvious signs to indicate instability of this product therefore, positive and negative controls should be run simultaneously with patient specimens.

Specimen Preparation
Paraffin Sections
Anti-human EpCAM Mouse Monoclonal Primary Antibody can be used on formalin-fixed, paraffin-embedded tissue sections at a working dilution of 1:100 to 1:200. Anti-human EpCAM clone UMAB131 Mouse Monoclonal Primary Antibody working dilution requires 20 minutes of pretreatment with Heat Induced Epitope Retrieval (HIER) for staining. We recommend using HIER Citrate Buffer pH 6.0, which showed optimal staining at a dilution of 1:200 on positive human colon cancer and negative staining on normal human lung and tonsil. The dilutions are estimates; the actual staining results may vary due to reagents and detection protocols used. Validation of antibody performance and final protocol are the responsibility of the end user.

Staining procedure
Manual Staining Procedure
1. Deparaffinize slides.
2. Submerge slides in peroxidase quenching solution for ~10 minutes and rinse with PBS-T 3 times, 2 minutes each.
3. Heat Induced Epitope Retrieval is required for this antibody.
4. Apply serum blocking solution.[Optional]
5. Apply primary antibody and incubate for 30-60 minutes at room temperature. After incubation wash with PBS-T 3 times, 2 minutes each.
6. Apply secondary antibody and incubate according to the data sheet of the detection system. Wash with PBS-T 3 times, 2 minutes each.
7. Apply enzyme conjugate and incubate according to data sheet of detection system. Wash with PBS-T 3 times, 2 minutes each.
8. Apply chromogen and incubate 5-10 minutes and rinse with distilled water.
**Staining interpretation**
The cellular staining pattern for Anti-human EPCAM Mouse Monoclonal Primary Antibody can be cytoplasmic and membranous.

**Performance Characteristics**
Predicted Staining in Normal Tissue/Cells
Normal human lung and tonsil were shown to be negative for this antibody.

Predicted Staining in Tumor
Anti-human EpCAM Mouse Monoclonal clone UMAB131 produced strong cytoplasmic and membranous positive stain when screened on positive human colon cancer tissue.

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