



Anti- human Ki-67 Mouse Monoclonal Primary Antibody

Clone: UMAB107

IVD

REF CE00002

CATALOG NUMBER

C0002MA01-MA 0.1 mL
C0002MA05-MA 0.5 mL
C0002MA10-MA 1.0 mL

ENGLISH

Intended use

Anti-human Ki-67 (Clone: UMAB107) Mouse Monoclonal Primary Antibody is intended for laboratory use in the immunohistochemistry detection of Ki-67 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

The Ki-67 gene encodes a nuclear protein that is associated with and may be necessary for cellular proliferation. In cancer, the fraction of Ki-67 positive tumor cells is often correlated with the pathology of the disease. Alternatively spliced transcript variants have been described. A related pseudogene exists on chromosome X. [provided by RefSeq, Mar 2009]

Alternative names: MKI67

Reagent provided

Anti- human Ki-67 (Clone: UMAB107) Mouse Monoclonal Primary Antibody 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 IgG2a. The protein concentration is 0.2 +/- 0.05 mg/mL.

For immunohistochemistry (IHC), the primary antibody may be used at a working dilution of 1:100 – 1:200 for formalin-fixed, paraffin-embedded human tissue. For IHC, the mouse anti-human Ki-67 (Clone: UMAB107) requires antigen retrieval, and the staining sensitivity is dependent upon the detection system used. These are guidelines only and optimal dilutions should be determined by the individual laboratory.

Immunogen

Human recombinant protein fragment corresponding to amino acids 1160-1493 of human Ki-67 (NP_002408) produced in E.coli.

Specificity

The specificity of the anti- human Ki-67 Mouse Monoclonal Primary Antibody was established on known positive tonsil and negative lung tissue. The anti-Ki-67 presented no staining on formalin fixed Ki-67 negative lung tissue and positive staining on formalin fixed tonsil 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 (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.
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 Ki-67 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 Ki-67 Mouse Monoclonal Primary Antibody working dilution requires 20 minutes of pretreatment with Heat Induced Epitope Retrieval (HIER) for staining. We recommend using HIER TEE Buffer pH 9.0 or Citrate pH 6.0, which both showed to have optimal staining at a dilution of 1:200 on Ki-67 positive tonsil tissue and negative staining on Ki-67 negative lung tissue using one step detection systems (Polink-1 Broad HRP). 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.

Cryostat Sections and Cell Smears

Anti- human Ki-67 (Clone UMAB107) Mouse Monoclonal Primary Antibody can also be used for labeling frozen tissue or fixed cell smears.

Staining procedure

Manual Staining Procedure

1. Deparaffinize slides.
2. Submerge slides in peroxidase quenching solution for ~10minutes and rinse with PBS-T 3 times, 2 minutes each.
3. Heat Induced Epitope Retrieval is required for this antibody (Citrate pH 6.0 or TEE pH 9.0).
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 according 5-10 minutes and rinse with distilled water.

Staining interpretation

The cellular staining pattern for Anti- human Ki-67 (Clone: UMAB107) Mouse Monoclonal Primary Antibody is nuclear.

Performance characteristics

Predicted Staining in Normal Tissue/Cells

Normal human lung was shown to be negative for this antibody.

Predictive Staining in Tumor

Anti- human Ki-67 Mouse Monoclonal (Clone: UMAB107) produced strong nuclear positive staining when screened on tonsil

tissue.

Contact Information



SDIX LLC
111 Pencader Drive
Newark, Delaware 19702
USA
+1 302 456 6789
+1 800 544 8881(USA)
www.SDIX.com

Product Complaint and/or Technical Support

techsupport@origene.com
+1 301 340 3188 (prompt 2)

Authorized Representative

Colin LeGood
Barnes Wallis House, 25 Barnes Wallis Road
Segensworth East, Hampshire PO15 5TT UK
Tel +44 (0) 1489 898640

