DRM004

Monoclonal Antibody to Ki-67 (C-term) - Supernatant

Alternate names: Ki67 antigen, MKI67, Proliferation marker
Quantity: 0.5 ml
Background: Ki-67 antigen is expressed in proliferating cells but not in quiescent cells. Expression of this antigen occurs preferentially during late G1, S, G2, and M phases of the cell cycle, while in cells in G0 phase the antigen cannot be detected. Consequently, Ki-67 antigen expression is used in tumor pathology to detect proliferating cells in neoplastic diseases. In cultured cells, Ki-67 is expressed in the nucleolus of interphase cells. The Ki-67 gene contains 15 exons. The Ki-67 repeat region, within which there is a 22-amino acid Ki-67 motif, is encoded by exon 13. The shorter isoform lacks exon 7. Northern blot analysis revealed multiple transcripts ranging from approximately 8.9 to 12.5 kb in proliferating but not quiescent cells. Immunoblot analysis showed expression of 320- and 359-kD proteins. Sequence analysis predicted that the short-lived 2,896- and 3,256-amino acid protein isoforms contain potential nuclear targeting signals, over 200 potential phosphorylation sites, 19 N-myristoylation sites, 3 amidation sites, and numerous PEST sites. Antisense oligonucleotides inhibited cellular proliferation in a dose-dependent manner, suggesting that Ki-67 protein expression may be an absolute requirement for cell proliferation.

Uniprot ID: P46013
NCBI: NP_001139438.1
GeneID: 4288
Host / Isotype: Rabbit / IgG
Clone: SP6
Immunogen: A synthetic peptide from C-terminus of Human Ki-67.
Format: State: Liquid Tissue Culture Supernatant
Preservatives: ≤ 0.09% Sodium Azide
Applications: Immunohistochemistry on Paraffin Sections: Use Ki67 antibody at a 1/50-1/100 dilution in an ABC method for 30 minutes at RT. Pretreatment: EDTA Buffer pH8.0 Recommended Positive Control: Tonsil. Also suitable for Western blot. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity: Reacts with Ki-67.
Cellular Localization: Nuclear.
Species Reactivity: Tested: Human and Mouse.
Storage: Store undiluted at 2-8°C. Shelf life: one year from despatch.
Product Citations: Purchased from Acris:


Pictures:

Formalin-fixed, paraffin-embedded human tonsil stained with Ki-67 antibody (Cat.-No DRM004) using peroxidase-conjugate and AEC. Note nuclear staining of proliferating cells.

Formalin-fixed, paraffin-embedded human tonsil stained with Ki-67 antibody (Cat.-No DRM004)