

## **Product datasheet for DRM004**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Ki67 (MKI67) (C-term) Rabbit Monoclonal Antibody [Clone ID: SP6]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: SP6
Applications: IHC

**Recommended Dilution:** 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.

Reactivity: Human, Rat, Mouse

Host: Rabbit Isotype: IgG

Clonality: Monoclonal

**Immunogen:** A synthetic peptide from C-terminus of Human Ki-67.

**Specificity:** Reacts with Ki-67.

Cellular Localization: Nuclear.

Formulation: State: Supernatant

State: Liquid Tissue Culture Supernatant Preservative: ≤ 0.09% Sodium Azide

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C.

**Stability:** Shelf life: one year from despatch.

**Gene Name:** marker of proliferation Ki-67

Database Link: Entrez Gene 4288 Human

P46013





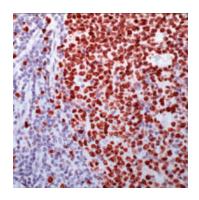
#### Background:

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 re-vealed multiple transcripts ranging from approximately 8.9 to 12.5 kb in proliferating but not quies-cent cells. Immunoblot analysis showed expression of 320- and 359-kD proteins. Sequence analy-sis 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 prolifera-tion in a dose-dependent manner, suggesting that Ki-67 protein expression may be an absolute requirement for cell proliferation.

Synonyms:

Ki67 antigen, MKI67, Proliferation marker

### **Product images:**



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.