

Product datasheet for DP026

Ki67 (MKI67) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Embedded Sections: Use a dilution of 1/25-1/50 in an ABC method (30 minutes at room temperature). Formalin fixed paraffin embedded tissue sections require high temperature antigen unmasking with 10 mM citrate buffer, pH 6.0 prior to immunostaining. Recommended Positive Control: Tonsil.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide from 62 base pair region of the Human Ki-67 antigen.
Specificity:	This antibody reacts with a nuclear antigen present in proliferating human cells. It can be used to evaluate the ki-67 labeling index in various tumors. Cellular Localization: Nuclear.
Formulation:	State: Purified State: Liquid purified Ig fraction Preservative: < 0.1% Sodium Azide
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	marker of proliferation Ki-67
Database Link:	Entrez Gene 4288 Human P46013



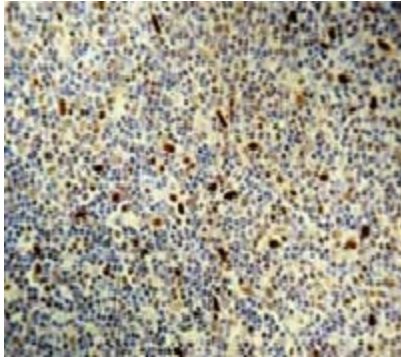
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Background:

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.

Synonyms:

Ki67 antigen, MKI67, Proliferation marker

Product images:

Formalin fixed paraffin embedded human tonsil stained with Ki-67 antibody. DP026