

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects a synthetic peptide specific for mouse Ki-67 around amino acid 1185 in Direct ELISA.
Source	Monoclonal Mouse IgG _{2A} Clone # 1088403
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Synthetic Peptide
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

MKI67 (also Ki67 and TSG126) is a 350-370 kDa nuclear protein that belongs to a molecular group comprised of mitotic chromosome-associated proteins. Ki67 was originally recognized as an antigen associated with the monoclonal Ki67 antibody raised against Hodgkin's lymphoma nuclear material. Ki67 is contextually expressed, being potentially found in all cells that are not in the Go phase of the cell cycle. Thus, MKI67 qualifies as a cell proliferation marker. Functionally, Ki67 is known to interact with 160 kDa Hk1p2, a protein that promotes centrosome separation and spindle bipolarity. It also directly interacts with NIFK, and apparently binds to UBF, thus playing a role in rRNA synthesis. Mouse MKI67 is 3177 amino acids (aa) in length. It contains one FHA domain (aa 8-101), followed by sixteen 120 aa repeats (aa 993-2872). There are two potential isoform variants. One isoform shows a 19 aa substitution for 1120-3177, while a second isoform contains a deletion of aa 1169-1409. Over aa 3053-3177, mouse Ki67 shares 46% and 74% aa sequence identity with the human and rat orthologs to Ki67, respectively.

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