

Human Ki-67/MKI67 Alexa Fluor® 647-conjugated Antibody

Recombinant Monoclonal Rabbit IgG Clone # 1297A Catalog Number: IC7617R

100 µg

DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human Ki-67/MKI67 in direct ELISAs.		
Source	Recombinant Monoclonal Rabbit IgG Clone # 1297A		
Purification	Protein A or G purified from cell culture supernatant		
Immunogen	Human Ki-67/MKI67 synthetic peptide Accession # P46013		
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm		
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.		
	*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.		

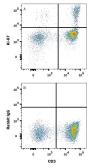
APPLICATIONS

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.

	Recommended Concentration	Sample	
Intracellular Staining by Flow Cytometry	0.25-1 μg/10 ⁶ cells	See Below	

DATA

Intracellular Staining by Flow Cytometry



Detection of Ki-67/MKI67 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) treated with 5 µg/mL PHA for 5 days were stained with (A)Rabbit Anti-Human Ki-67/MKI67 Alexa Fluor® 647-conjugated Monoclonal Antibody (Catalog # IC7617R) or (B) Rabbit IgG control antibody (Catalog # IC1051R) and Mouse Anti-Human CD3 epsilon PE-conjugated Monoclonal Antibody (Catalog # FAB100P). To facilitate intracellular staining, cells were fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012). View our protocol for Staining Intracellular Molecules.

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

BACKGROUNE

MKI67 (also Ki-67) is a 350-400 kDa nuclear protein that belongs to a molecular group comprised of mitotic chromosome-associated proteins. Ki-67 was originally recognized as an antigen associated with the monoclonal Ki-67 antibody raised against Hodgkin's lymphoma nuclear material. Ki-67 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, Ki-67 is known to interact with 160 kDa Hklp2, 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. Human MKI67 is 3256 amino acids (aa) in length. It contains one FHA domain (aa 8-98), followed by at least 24 utilized Ser/Thr phosphorylation sites and sixteen 120 aa repeats (aa 1000-2928) that are interspersed with at least 90 additional utilized phosphorylation sites. There are two potential isoform variants. One isoform is 315-345 kDa in size and shows a deletion of aa 136-495, while a second isoform contains a 58 aa substitution for aa 1-513. Over aa 3120-3256, human Ki-67 shares 46% aa sequence identity with the mouse ortholog to Ki-67.

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PRODUCT SPECIFIC NOTICES

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