ARG55041
anti-Ki-67 antibody [Ki-67] (PE)

Package: 50 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [Ki-67] recognizes Ki-67
Tested Reactivity	Hu, Cow
Tested Application	FACS
Specificity	The mouse monoclonal antibody Ki-67 recognizes Ki-67 antigen, a non-histone nuclear protein expressed exclusively in proliferating cells.
Host	Mouse
Clonality	Monoclonal
Clone	Ki-67
Isotype	IgG1
Target Name	Ki-67
Species	Human
Immunogen	Nuclei of the Hodgkin lymphoma cell line L428.
Conjugation	PE
Alternate Names	Antigen KI-67; MIB-; KIA; MIB-1; PPP1R105

Application Instructions

Application table

Application	Dilution
FACS	10 µl / 100 µl of whole blood or 10^6 cells

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

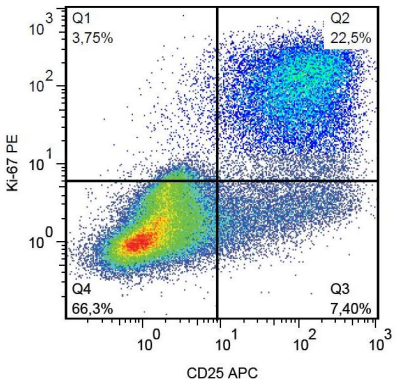
Properties

Form	Liquid
Purification	Purified
Buffer	PBS and 15 mM Sodium azide.
Preservative	15 mM Sodium azide
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	MKI67
Gene Full Name	marker of proliferation Ki-67
Background	This gene encodes a nuclear protein that is associated with and may be necessary for cellular proliferation. Alternatively spliced transcript variants have been described. A related pseudogene exists on chromosome X. [provided by RefSeq, Mar 2009]
Function	Required to maintain individual mitotic chromosomes dispersed in the cytoplasm following nuclear envelope disassembly (PubMed:27362226). Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the chromosome surface (PubMed:27362226). Prevents chromosomes from collapsing into a single chromatin mass by forming a steric and electrostatic charge barrier: the protein has a high net electrical charge and acts as a surfactant, dispersing chromosomes and enabling independent chromosome motility (PubMed:27362226). Binds DNA, with a preference for supercoiled DNA and AT-rich DNA (PubMed:10878551). Does not contribute to the internal structure of mitotic chromosomes (By similarity). May play a role in chromatin organization (PubMed:24867636). It is however unclear whether it plays a direct role in chromatin organization or whether it is an indirect consequence of its function in maintaining mitotic chromosomes dispersed (Probable). [UniProt]
Calculated Mw	359 kDa
PTM	Phosphorylated. Hyperphosphorylated in mitosis (PubMed:10502411, PubMed:10653604). Hyperphosphorylated form does not bind DNA. [UniProt]
Cellular Localization	Chromosome. Nucleus, nucleolus. Note=Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the mitotic chromosome surface. Associates with satellite DNA in G1 phase. Binds tightly to chromatin in interphase, chromatin-binding decreases in mitosis when it associates with the surface of the condensed chromosomes. Predominantly localized in the G1 phase in the perinucleolar region. [UniProt]

Images



ARG55041 anti-Ki-67 antibody [Ki-67] (PE) FACS image

Flow Cytometry: Human peripheral blood mononuclear cells stimulated with PHA. Surface staining of ARG53800 anti-CD25 antibody [MEM-181] (APC) was followed by permeabilization and nuclear staining of ARG55041 anti-Ki-67 antibody [Ki-67] (PE).