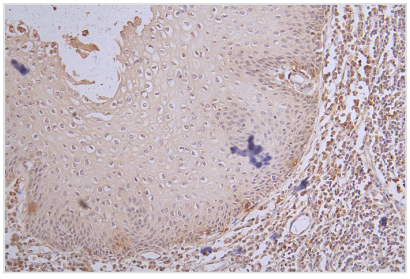
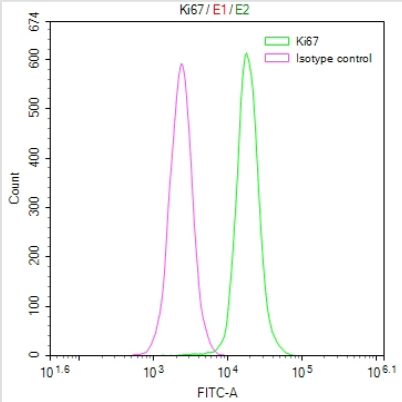
MKI67 Recombinant Monoclonal Antibody

Product Code	CSB-RA984483A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P46013
Immunogen	A synthesized peptide derived from Human MKI67
Species Reactivity	Human
Tested Applications	ELISA, IHC, FC; Recommended dilution: IHC:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience?Cancer;Cell biology;Tags & Cell Markers
Gene Names	MKI67
Clone No.	16H10

Image



IHC image of CSB-RA984483A0HU diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.65% DAB.



Overlay Peak curve showing Hela cells stained with CSB-RA984483A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1μg/1*10^6cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1μg/1*10^6cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The process of generating a recombinant monoclonal antibody against MKI67 began with the immunization of a rabbit using a synthesized peptide from human MKI67 protein. B cells were subsequently isolated from the immunized rabbit, and RNA was extracted from these B cells. The extracted RNA was reverse-transcribed into cDNA, which was utilized as a template for amplifying MKI67 antibody genes using degenerate primers. These amplified MKI67 antibody genes were then integrated into a plasmid vector and introduced into host cells for expression. The MKI67 recombinant monoclonal antibody was then purified from the cell culture supernatant through affinity chromatography and subjected to ELISA, IHC, and FC applications, displaying specific reactivity with human MKI67 protein.

The main function of the MKI67 protein, also known as Ki-67, is as a cellular marker for cell proliferation. MKI67 is not directly involved in regulating the cell cycle or cell proliferation itself but serves as a valuable marker for assessing the proliferative activity of cells. Its primary function is to indicate whether a cell is in an active, proliferative state.