

### Ki-67 Monoclonal Antibody(4A8)

Catalog No: YM3064

Reactivity: Human

**Applications:** IHC;IF

Target: Ki-67

Gene Name: MKI67

Protein Name: Ki 67

Human Gene Id: 4288

**Human Swiss Prot** 

No:

Immunogen: Synthetic Peptide of Ki 67

P46013

**Specificity:** The antibody detects endogenous Ki 67 proteins.

**Formulation:** PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and

50% Glycerol.

Source: Monoclonal, Mouse

**Dilution:** IHC 1:200 IF 1:50-200

**Purification:** The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 359kD

**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:**

developmental stage: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.,function:Thought to be required for maintaining cell proliferation.,online information:Ki-67 entry,similarity:Contains 1 FHA domain.,subcellular location:Predominantly localized in the G1 phase in the perinucleolar region, in the later phases it is also detected throughout the nuclear interior, being predominantly localized in the nuclear matrix. In mitosis, it is present on all chromosomes.,subunit:Interacts with KIF15. Binds through the FHA domain to MKI67IP.,

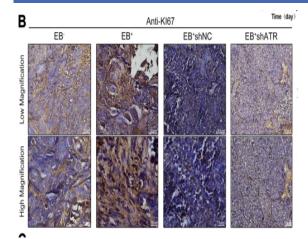
# Subcellular Location:

Chromosome . Nucleus . Nucleus, nucleolus . Associates with the surface of the mitotic chromosome, the perichromosomal layer, and covers a substantial fraction of the mitotic chromosome surface (PubMed:27362226). Associates with satellite DNA in G1 phase (PubMed:9510506). Binds tightly to chromatin in interphase, chromatin-binding decreases in mitosis when it associates with the surface of the condensed chromosomes (PubMed:15896774, PubMed:22002106). Predominantly localized in the G1 phase in the perinucleolar region, in the later phases it is also detected throughout the nuclear interior, being predominantly localized in the nuclear matrix (PubMed:22002106).

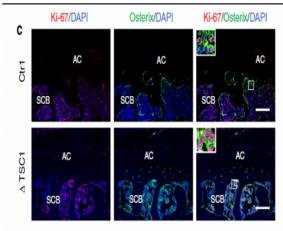
### **Expression:**

Epithelium,

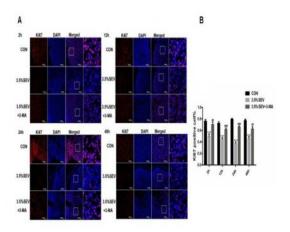
## **Products Images**



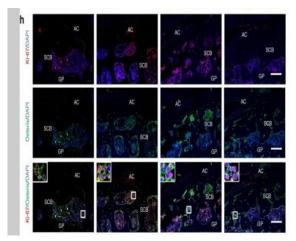
Zhang, B., Miao, T., Shen, X. et al. EB virus-induced ATR activation accelerates nasopharyngeal carcinoma growth via M2-type macrophages polarization. Cell Death Dis11, 742 (2020).



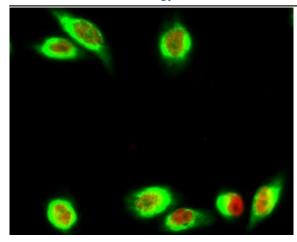
Chuangxin Lin, et al."Activation of mTORC1 in subchondral bone preosteoblasts promotes osteoarthritis by stimulating bone sclerosis and secretion of CXCL12". Bone Research (2019) 7:5



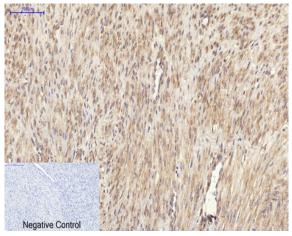
Li, Xingyue, et al. "Activation of Autophagy Contributes to Sevoflurane-Induced Neurotoxicity in Fetal Rats." Frontiers in molecular neuroscience 10 (2017): 432.



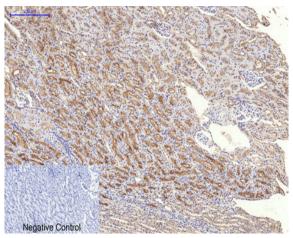
Lin, Chuangxin, et al. "Activation of mTORC1 in subchondral bone preosteoblasts promotes osteoarthritis by stimulating bone sclerosis and secretion of CXCL12." Bone research 7.1 (2019): 5.



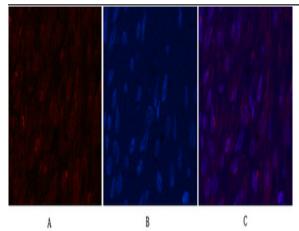
Immunofluorescence analysis of Hela cell. 1,Annexin VI Polyclonal Antibody(green) was diluted at 1:200(4° overnight). (red) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog:RS3608 was diluted at 1:1000(room temperature, 50min).



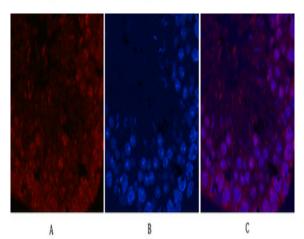
Immunohistochemical analysis of paraffin-embedded Humanuterus-cancer tissue. 1,Ki 67 Monoclonal Antibody(4A8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



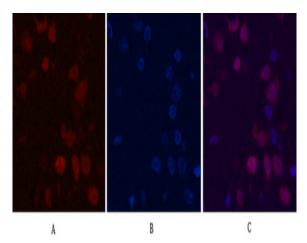
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,Ki 67 Monoclonal Antibody(4A8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



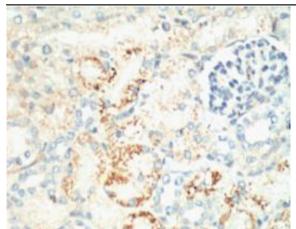
Immunofluorescence analysis of Human-breast-cancer tissue. 1,Ki 67 Monoclonal Antibody(4A8)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Mouse-testis tissue. 1,Ki 67 Monoclonal Antibody(4A8)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Rat-brain tissue. 1,Ki 67 Monoclonal Antibody(4A8)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



IHC staining of Mouse Kidney tissue, diluted at 1:200.