兔抗丝氨酸苏氨酸蛋白激酶 ATR 多克隆抗体

产品货号： mIR23805

英文名称： ATR

中文名称： 兔抗丝氨酸/苏氨酸蛋白激酶 ATR 多克隆抗体

别　　名： ACTR; AIB1; amplified in breast cancer 1; Ataxia Telangiecasia and Rad3 Related; Ataxia telangiectasia and Rad3 related; Ataxia telangiectasia and Rad3-related protein; ATR; ATR_HUMAN; CAGH16; CBP interacting protein; CTG26; FCTCS; FRAP Related Protein 1; FRAP-related protein 1; FRP 1; FRP1; Human JTV 1; MEC1; MEC1 mitosis entry checkpoint 1 homolog; nuclear receptor coactivator 3; pCIP; protein kinase ATR; RAC3; Rad3 related protein; receptor associated coactivator 3; SCKL; SCKL1; Seckel syndrome; Serine/threonine protein kinase ATR; Serine/threonine-protein kinase ATR; steroid receptor coactivator protein 3; thyroid hormone receptor activator molecule 1; TRAM1.

研究领域： 肿瘤　细胞生物　免疫学　细胞凋亡　激酶和磷酸酶　表观遗传学

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Zebrafish, Sheep,

产品应用： WB=1:500-2000 IHC-P=1:400-800 IHC-F=1:400-800 ICC=1:100-500 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 301kDa

细胞定位： 细胞核

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human ATR:

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 ° C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20° C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ° C.

PubMed : PubMed

产品介绍 ： Ataxia Telangiectasia Mutated (ATM) and Rad 3-related protein (ATR) is a phosphatidylinositol kinase (PK)-related kinase which functions in response to DNA damage and repair as well as at DNA replication checkpoints during the cell cycle. ATR is a member of the DNA-PK kinases closely related to ATM and DNA-PK for which DNA stimulates the observed kinase activity. Chromosomal remodeling proteins have also been reported to associate with ATR complexes. Several known components of the NuRD complex including histone deacetylase 1 (HDAC1), HDAC2, and CHD4

Function:

Serine/threonine protein kinase which activates checkpoint signaling upon genotoxic stresses such as ionizing radiation (IR), ultraviolet light (UV), or DNA replication stalling, thereby acting as a DNA damage sensor. Recognizes the substrate consensus sequence [ST]-Q. Phosphorylates BRCA1, CHEK1, MCM2, RAD17, RPA2, SMC1 and p53/TP53, which collectively inhibit DNA replication and mitosis and promote DNA repair, recombination and apoptosis. Phosphorylates 'Ser-139' of histone variant H2AX/H2AFX at sites of DNA damage, thereby regulating DNA damage response mechanism. Required for FANCD2 ubiquitination. Critical for maintenance of fragile site stability and efficient regulation of centrosome duplication.

Subunit:

Interacts with CARM1 (By similarity). Present in a complex containing NCOA2, IKKA, IKKB, IKBKG and the histone acetyltransferase protein CREBBP. Interacts with CASP8AP2, NR3C1 and PCAF. Interacts with ATAD2 and this interaction is enhanced by estradiol. Found in a complex containing NCOA3, AR and MAK. Interacts with DDX5.

Subcellular Location:

Cytoplasm. Nucleus. Note=Mainly cytoplasmic and weakly nuclear. Upon TNF activation and subsequent phosphorylation, it translocates from the cytoplasm to the nucleus.

Tissue Specificity:

Ubiquitous, with highest expression in testis. Isoform 2 is found in pancreas, placenta and liver but not in heart, testis and ovary.

Post-translational modifications:

Acetylated by CREBBP. Acetylation occurs in the RID domain, and disrupts the interaction with nuclear receptors and regulates its function.

Methylated by CARM1 (By similarity).

Phosphorylated by IKK complex. Regulated its function. Phosphorylation at Ser-601 by CK1 promotes coactivator function.

DISEASE:

Defects in ATR are a cause of Seckel syndrome type 1 (SCKL1) [MIM:210600]. SCKL1 is a rare autosomal recessive disorder characterized by growth retardation, microcephaly with mental retardation, and a characteristic 'bird-headed' facial appearance.

Similarity:

Belongs to the PI3/PI4-kinase family. ATM subfamily.

Contains 1 FAT domain.

Contains 1 FATC domain. Contains 2 HEAT repeats. Contains 1 PI3K/PI4K domain.

SWISS:

Q13535

Gene ID:

545

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

产品图片