

NSMCE1 蛋白抗体

产品货号： mlR19473

英文名称： NSMCE1

中文名称： NSMCE1 蛋白抗体

别 名： HSPC333; HSPC337; Non SMC element 1 homolog (S. cerevisiae); Non SMC element 1 homolog; NSE1_HUMAN; Non structural maintenance of chromosomes element 1 homolog; NSE1; NSMCE 1.

研究领域： 细胞生物 表观遗传学

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Cow,

产品应用： ELISA=1:500-1000 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： 31kDa

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 NSMCE1:21-120'/266

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： Breaks in double stranded DNA often arise during DNA replication or as a result of exposure to DNA-damaging agents. Quick and accurate repair of these breaks is crucial for cell survival and genomic stability. Structural maintenance of chromosomes (SMC) family members form heterodimeric complexes that modulate sister chromatid cohesion and chromosome condensation during mitosis. SMC5 and SMC6 play a crucial role in DNA repair as they form a complex with six conserved nonSMC subunits, including a ubiquitin E3 ligase NSE1 and a SUMO ligase NSE2. Specifically, this complex is crucial for sister chromatid homologous recombination DNA repair and also for prevention of chromosomal rearrangements. The NSE1 protein contains a RING-like motif that promotes DNA repair functions of the SMC5/SMC6 complex and full deletion of NSE1 is lethal to cells. NSE2 stimulates sumoylation of SMC6 and the DNA repair protein TRAX. Depletion of the NSE2 protein by RNA interference leaves the cell vulnerable to DNA damage-induced apoptosis.

Function:

Component of the SMC5-SMC6 complex, a complex involved in DNA double-strand breaks by homologous recombination. The complex may promote sister chromatid homologous recombination by recruiting the SMC1-SMC3 cohesin complex to double-strand breaks. The complex is required for telomere maintenance via recombination in ALT (alternative lengthening of telomeres) cell lines and mediates sumoylation of shelterin complex (telosome) components which is proposed to lead to shelterin complex disassembly in ALT-associated PML bodies (APBs). Has in vitro ubiquitin ligase activity in presence of NDNL2. Is involved in positive regulation of response to DNA damage stimulus.

Subunit:

Component of the SMC5-SMC6 complex which consists at least of SMC5, SMC6, NSMCE2, NSMCE1, NSMCE4A or EID3 and NDNL2. NSMCE1, NSMCE4A or EID3 and NDNL2 probably form a subcomplex that bridges the head domains of the SMC5:SMC6 heterodimer.

Subcellular Location:

Nucleus. Chromosome, telomere

Post-translational modifications:

Ubiquitinated.

Similarity:

Belongs to the NSE1 family. Contains 1 NSE1-type zinc finger.

SWISS:

Q8WV22

Gene ID:

197370

Important Note:

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