

单链结合蛋白 70 抗体

产品货号： mlR11233

英文名称： RPA70

中文名称： 单链结合蛋白 70 抗体

别 名： Dmrpa1; Drosophila Replication Protein A; DRPA; HSSB; Human single stranded DNA binding protein; MST075; MSTP075; p70 antibody REPA1; Replication factor A; Replication factor A protein 1; Replication protein A 70 kDa DNA-binding subunit; Replication protein A 70kDa DNA binding subunit; Replication protein A1 70kDa; Replication protein A1; RF A; RF-A protein 1; RFA; RFA1_HUMAN; RP A; RP-A p70; RPA 70; RPA; Single stranded binding protein 70; Single-stranded DNA-binding protein.

研究领域： 染色质和核信号 表观遗传学

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Dog, Pig, Rabbit,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 Flow-Cyt=1ug/Test
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： 68kDa

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 RPA70:201-300/616

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： The single-stranded-DNA-binding proteins (SSBs) are essential for DNA function in prokaryotic and eukaryotic cells, mitochondria, phages and viruses. Replication protein A (RPA), a highly conserved eukaryotic protein, is a heterotrimeric SSB. RPA plays an important role in DNA replication, recombination and repair. The binding of human RPA (hRPA) to DNA involves molecular polarity in which initial hRPA binding occurs on the 5' side of an ssDNA substrate and then extends in the 3' direction to create a stably bound hRPA. RPA is a major damage-recognition protein involved in the early stages of nucleotide excision repair. It can also play a role in telomere maintenance. The RPA 70 kDa subunit binds to ssDNA and mediates interactions with many cellular and viral proteins. The DNA binding domain lies in the middle of RPA 70 kDa subunit and comprises two structurally homologous subdomains oriented in tandem. RPA contains a conserved four cysteine-type zinc-finger motif, which mediates the transition of RPA-ssDNA interaction to a stable RPA-ssDNA complex in a redox-dependent manner.

Function:

Plays an essential role in several cellular processes in DNA metabolism including replication, recombination and DNA repair. Binds and subsequently stabilizes single-stranded DNA intermediates and thus prevents complementary DNA from reannealing.

Subunit:

Heterotrimer composed of RPA1, RPA2 and RPA3 (canonical replication protein A complex). Component of the

alternative replication protein A complex (aRPA) composed of RPA1, RPA3 and RPA4. The DNA-binding activity may reside exclusively on the RPA1 subunit. Interacts with RIPK1 and XPA. Interacts with RPA4. Interacts with the polymerase alpha subunit POLA1/p180; this interaction stabilizes the replicative complex and reduces the misincorporation rate of DNA polymerase alpha by acting as a fidelity clamp. Interacts with RAD51 and SENP6 to regulate DNA repair. Interacts with HELB; this interaction promotes HELB recruitment to chromatin following DNA damage.

Subcellular Location:

Nucleus.

Similarity:

Belongs to the replication factor A protein 1 family.

SWISS:

P27694

Gene ID:

6117

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

