

磷酸化热休克因子 1 兔单克隆抗体

产品货号： mlR52166

英文名称： phospho-HSF1 (Ser326)

中文名称： 磷酸化热休克因子 1 兔单克隆抗体

别名： HSF1(S326); HSF1 (phospho S326); p-HSF1 (phospho S326); Heat shock factor 1; Heat shock factor protein 1; Heat shock transcription factor 1; HSF 1; hsf1; HSTF 1; HSTF1; HSF1_HUMAN.

产品类型： 磷酸化抗体

研究领域： 肿瘤 信号转导 细胞凋亡 转录调节因子

抗体来源： Rabbit

克隆类型： Monoclonal

克隆号： 37E4

交叉反应： Human, Mouse, Rat,

产品应用： WB=1:500-2000 IHC-P=1:50-200 IHC-F=1:50-200 ICC=1:50-200 IF=1:50-200 (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： 57kDa

细胞定位： 细胞核 细胞浆

性状： Liquid

浓度： 1mg/ml

免疫原： KLH conjugated Synthesised phosphopeptide derived from human HSF1 around the phosphorylation site of Ser326:L(p-S)PT

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 product of this gene is a heat-shock transcription factor. Transcription of heat-shock genes is rapidly induced after temperature stress. Hsp90, by itself and/or associated with multichaperone complexes, is a major repressor of this gene. [provided by RefSeq, Jul 2008]

Function:

DNA-binding protein that specifically binds heat shockpromoter elements (HSE) and activates transcription. In highereukaryotes, HSF is unable to bind to the HSE unless the cells areheat shocked.

Subunit:

Monomer. Under normal conditions, interacts with HSP90AA1in the HSP90 multichaperone complex; the interaction preventstrimerization and activation of HSF1. On activation by heat-stressor by other factors such as metal ions, HSF1 is released from thecomplex, homotrimerizes, is hyperphosphorylated and translocated tothe nucleus where, subsequently, it can activate transcription.Binds the complex through the regulatory domain. Interacts withSYMPK and CSTF2 in heat-stressed cells. Interacts with FKBP4 in theHSP90 multichaperone complex; the interaction is independent of thephosphorylation state of HSF1. Interacts with MAPKAPK2.

Subcellular Location:

Cytoplasm. Nucleus. Note=Cytoplasmic during normal growth. On activation, translocates to nuclear stress granules. Colocalizes with SUMO1 in nuclear stress granules.

Post-translational modifications:

Phosphorylated on multiple serine residues, a subset of which are involved in stress-related regulation of transcription activation. Constitutive phosphorylation represses transcriptional activity at normal temperatures. Levels increase on specific residues heat-shock and enhance HSF1 transactivation activity. Phosphorylation on Ser-307 derepresses activation on heat-stress and in combination with Ser-303 phosphorylation appears to be involved in recovery after heat-stress. Phosphorylated on Ser-230 by CAMK2, in vitro. Cadmium also enhances phosphorylation at this site. Phosphorylation on Ser-303 is a prerequisite for HSF1 sumoylation. Phosphorylation on Ser-121 inhibits transactivation and promotes HSP90 binding. Phosphorylation on Thr-142 also mediates transcriptional activity induced by heat.

Sumoylated with SUMO1 and SUMO2 on heat-shock. Heat-inducible sumoylation occurs after 15 min of heat-shock, after which levels decrease and at 4 hours, levels return to control levels. Sumoylation has no effect on HSE binding nor on transcriptional activity. Phosphorylation on Ser-303 is a prerequisite for sumoylation.

Similarity:

Belongs to the HSF family.

SWISS:

Q00613

Gene ID:

3297

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

