

Anti-HSF1 Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 12518 (clone 10H8)
Size: 100ug in PBS, pH 7.4, purified by Protein G affinity chromatography.

BACKGROUND

Heat shock factor 1 (HSF1) is a heat shock transcription factor that activates the transcription of genes encoding products required for protein folding, processing, targeting, degradation, and function. Up-regulation of expression of heat shock proteins in response to stress occurs at the level of transcription through a heat shock element and a HSF transcription factor. Amino acid sequences for most HSFs are highly conserved. A DNA binding domain is at the N-terminus, hydrophobic repeats (essential to the formation of active trimers) are adjacent to this binding domain, and another short hydrophobic repeat (necessary for suppression of trimerization) occurs toward the C-terminus. In higher eukaryotes, HSF1 is distributed diffusely in the cell cytoplasm and nucleus in unstressed cells. On exposure to heat shock or other stresses, HSF1 localizes to discrete nuclear granules; on recovery from stress, it returns to a diffuse nuclear-cytoplasmic distribution.

SPECIFICATION SUMMARY

Antigen: Recombinant mouse HSF-1
Host Species: Rat
Antibody Class: IgG1
Preservatives: 0.09% sodium azide
Other additives: 50% glycerol

SPECIFICITY

This antibody recognizes an ~85 kDa protein (inactive form) in unstressed cell lysates and an ~95 kDa protein (active form) in heat-shocked cell lysates of human, mouse, rat, rabbit, bovine, guinea pig, hamster, and monkey.

APPLICATIONS

Immunoblotting: use at 1-2ug/ml. A band of ~85 and/or ~95 kDa is detected.

Immunocytochemistry: use at 10ug/ml.

Immunoprecipitation: use at 12.5ug/ml
These are recommended concentrations.

User should determine optimal concentrations for their application.

Positive control: HeLa cell lysate

DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid repeated freezing and thawing.

REFERENCE

Cotto, J et al. 1997 J Cell Science 110: 2925-2934.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.