

Rat anti Heat Shock Factor 1 Monoclonal Antibody

Alternative Name(s): HSF1; Heat shock factor protein 1

Order Information

• Description: Heat Shock Factor 1

Catalogue: 500-7654Lot: See labelSize: 100ug/200ulHost: Rat

• Clone: ABM401

• Application: IHC(P), WB • Reactivity: Hu, Ms, Rt

ANTIGEN PREPARATION

A recombinant mouse HSF1 (1-503aa) protein.

BACKGROUND

Heat-shock factor 1 (HSF1) is the master transcriptional regulator to respond to the cellular stress signals, such as heat, heavy metals, and oxidative reagents and a wide variety of other stressors. It binds to heat shock response elements (HSEs) in the upstream region of heat shock gene and activates their transcription. Some laboratories have reported that the constitutive, non-DNA binding, monomeric form of inactive HSF1 is located in the cytoplasm. Upon activation, HSF1 is trimerized and is localized in nucleus where it binds DNA. The increased HSF1 which is associated with reduced breast cancer survival may imply that HSF1 should be evaluated prospectively as an independent prognostic indicator in ER-positive breast cancer. HSF1 may ultimately be a useful therapeutic target in cancer.

PURIFICATION

The mouse IgG is purified by Protein A-Affinity Chromatography according to Isotyping

FORMULATION

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

SPECIFICITY

This antbody recognizes Heat Shock Factor 1 protein. It reacts to human, mice and rat. The other species not tested.

STORAGE

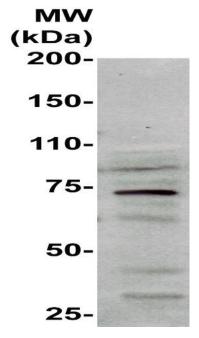
The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

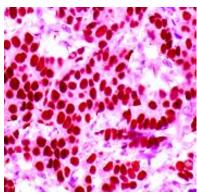
- Western Blot: 0.1-1 µg/ml
- ELISA: 0.01-0.1 µg/ml
- Immunoprecipitation: 2-5 µg/ml
- IHC: 2-10 µg/ml
- · Flow cytometry: Not tested
- Molecular Weight: 70.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

^{*}Optimal dilutions should be determined by researchers for the specific applications.





Western Blot: The cell lysate was derived from MCF7 was resolved onto 7.5% SDS-PAGE, transferred onto NC membrane, and immunoprobed by Rat anti HSF1 (Cat# 500-7654) at 1:500 dilution. A major immunoreactive band is observed around 70kDa.



Immunohistochemistry: Human breast carcinoma tissue (FFPE) stained with Rat anti HSF1 antibody (Cat# 500-7654) at 1:100 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

REFERENCES