Thermo SCIENTIFIC

DATA SHEET
Rev 120402G

Heat Shock Factor 1 (HSF1) Ab-4 (Clones 4B4 + 10H4 + 10H8)

Rat Monoclonal Antibody

Cat. #RT-629-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)
Cat. #RT-629-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)
Cat. #RT-629-R7 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)
Cat. #RT-629-PCS (5 Slides) (Positive Control for Histology)
Cat. #RT-629-PCL (0.1ml) (Positive Control for Western Blot)

Description: HSF1 responds to cellular stress signals such as heat, heavy metals, and oxidative reagents; 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.

Comments: Ab-4 cocktail is especially designed for sensitive detection of HSF1.

Epitope: aa 288-439

Mol. Wt. of Antigen: 70-85kDa (depending upon the source and state of cells)

Species Reactivity: Human, Mouse, and Rat. Others not known.

Clone Designation: 4B4 + 10H4 + 10H8

Ig Isotype: $IgG_1 + IgG_1 + IgG_1$

Immunogen: Recombinant mouse HSF1 protein (aa 1-503).

Applications and Suggested Dilutions:

- Gel Supershift (Order Ab at 1mg/ml)
- Immunofluorescence
- Immunoprecipitation (Native only)
  (Use Protein G) (Ab 2µg/mg protein lysate)
- Western Blotting (Ab 1-2µg/ml for 2hrs at RT)
- Immunohistology (Formalin/paraffin)
  (Ab 2-4 µg/ml for 30 min at RT)

* [Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 10mM citrate buffer, pH 6.0, (***NEOMARKERS'*** Cat. #AP-9003), for 10-20 min followed by cooling at RT for 20 min.]

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: LS174T cells. Breast carcinoma.

Cellular Localization: Nuclear

Supplied As: 200µg/ml antibody purified from ascites fluid by ammonium sulfate precipitation and prepared in 10mM PBS, pH 7.4, with 0.2% BSA & 0.09% azide. Also available without BSA or azide, or at 1mg/ml. or Prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Suggested References:

1. Baler, R., et al. Molecular & Cellular Biology, 13:2486-96.
2. Clos, J., et al. Cell, 63:1085-97.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only

Additional Suggested References:

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