

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse HSF1 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human HSF2 or recombinant mouse HSF4 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 744509
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse HSF1 Thr124-Tyr247 Accession # P38532
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Heat Shock Factor 1 (HSF1) is a 75-80 kDa constitutively expressed protein that functions as a transcriptional regulator under heat shock conditions. Heat stress induces the serine hyperphosphorylation, sumoylation, trimerization, and translocation of HSF1 to the nucleus. Nuclear HSF1 binds to heat shock elements (HSE) and promotes the transcription of genes important in cell protection from heat stress. Mouse HSF1 contains a DNA binding domain (aa 16-120), two hydrophobic oligomerization motifs (aa 137-212 and aa 378-407), a regulatory domain (aa 221-310), and a transactivation domain (aa 367-525). Alternate splicing of mouse HSF1 generates a short isoform that lacks 22 amino acids of the transactivation domain. Within aa 124-247, mouse HSF1 shares 94% and 99% aa sequence identity with human and rat HSF1, respectively.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.