Mouse HSF1 Alexa Fluor® 488-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF7130G
100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse HSF1 in direct ELISAs. In direct ELISAs, approximately 6% cross-reactivity with recombinant mouse HSF4 is observed and less than 1% cross-reactivity with recombinant human HSF2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant mouse HSF1 Thr124-Tyr247 Accession # P38532
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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

HSF1 (Heat Shock Factor 1; also HSTF 1) is a 67-75 kDa member of the HSF family of proteins. It is constitutively expressed and functions as a transcriptional activator under heat shock conditions. Normally, it exists as an inactive, monomeric member of the HSP multichaperone complex. Following stress, it dissociates from the complex, homotrimerizes, undergoes multiple phosphorylations, and translocates to the nucleus. Nuclear HSF1 is SUMOylated on Lys298 and binds to heat shock elements in select genes such as HSP70. Mouse HSF1 is 525 amino acids (aa) in length. It contains a DNA binding domain (aa 15-120), two hydrophobic oligomerization regions (aa 130-203 and 380-405), a regulatory domain (aa 221-310), and a transactivation domain (aa 367-525). There are at least 13 potential Ser/Thr phosphorylation sites. When highly phosphorylated, HSF1 appears to run at about 82-85 kDa in SDS-PAGE; when SUMOylated, it runs anomalously at around 170 kDa in SDS-PAGE. One splice variant exists that shows a deletion of aa 413-434. Over aa 124-247, mouse HSF1 shares 94% and 99% aa identity with human and rat HSF1, respectively.

PRODUCT SPECIFIC NOTICES

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475