

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human HSP70/HSPA1A in direct ELISAs. Detects, human, mouse, and rat HSP70/HSPA1A in Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 998953
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human HSP70/HSPA1A Met1-Asp641 Accession # P0DMV8 and P0DMN9
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
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 proteins (HSPs) are a family of highly conserved stress response proteins. Heat shock proteins function primarily as molecular chaperones by facilitating the folding of other cellular proteins, preventing protein aggregation or targeting improperly folded proteins to specific degradative pathways. HSPs are typically expressed at low levels under normal physiological conditions but are dramatically up-regulated in response to cellular stress. HSP70 is a 72 kDa member of the heat shock protein 70 family of proteins. HSP70, also known as HSPA1A, HSP70-1, and HSP72 is a 641 amino acid (aa) heat shock protein. Over aa 1-641, human HSP70 shares 95% and 97% aa identity to mouse and rat HSP70.

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