

Human/Mouse/Rat HSP70/HSPA1A Antibody

Antigen Affinity-purified Polyclonal Rabbit IgG Catalog Number: AF1663

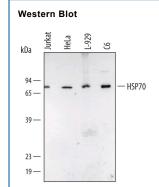
DESCRIPTION		
Species Reactivity	Human/Mouse/Rat	
Specificity	Detects the induced form of recombinant endogenous human, mouse and rat HSP70/HSPA1A (HSP72) in Western blots. In Western blots, no cross-reactivity with the constitutively expressed HSC70 (HSP73) is detected.	
Source	Polyclonal Rabbit IgG	
Purification	Antigen and protein A Affinity-purified	
Immunogen	E. coli-derived recombinant human HSP70 Met1-Asp641 Accession # P08107	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.	

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.

	Recommended Concentration	Sample
Western Blot	0.1 μg/mL	See Below

DATA



Detection of Human, Mouse, and Rat HSP70/HSPA1A by Western Blot.

Western blot shows Iysates of Jurkat human acute T cell leukemia cell line, HeLa human cervical epithelial carcinoma cell line, L-929 mouse fibroblast cell line, and C6 rat glioma cell line. PVDF membrane was probed with 0.1 µg/mL of Rabbit Anti-Human/Mouse/Rat HSP70/HSPA1A Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1663) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for HSP70/HSPA1A at approximately 72 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

PREPARATION AND STORAGE

TREFARATION AND STORAGE		
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. ■ 12 months from date of receipt, -20 to -70 °C as supplied.	

- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months. -20 to -70 °C under sterile conditions after reconstitution.

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. HSP70 plays an imprortant role in . Over aa 1-641, human HSP70 shares 95% and 97% aa identity to mouse and rat HSP70.

