

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat HSP60 in Western blots.
<b>Source</b>	Polyclonal Rabbit IgG
<b>Purification</b>	Antigen and protein A Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human HSP60 Met1-Phe573 Accession # P10809
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

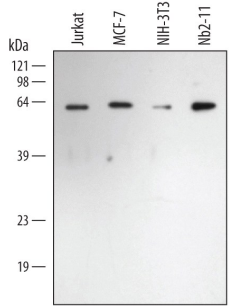
## APPLICATIONS

**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
<b>Western Blot</b>	0.1 µg/mL	See Below
<b>Simple Western</b>	0.5 µg/mL	See Below

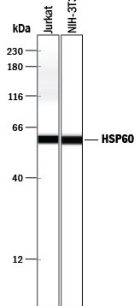
## DATA

**Western Blot**




**Detection of Human/Mouse/Rat HSP60 by Western Blot.** Western blot shows lysates of Jurkat human acute T cell leukemia cell line, MCF-7 human breast cancer cell line, NIH-3T3 mouse embryonic fibroblast cell line, and Nb2-11 rat lymphoma cell line. PVDF membrane was probed with 0.1 µg/mL of Rabbit Anti-Human/Mouse/Rat HSP60 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1800) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for HSP60 at approximately 62 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Simple Western**



**Detection of Human and Mouse HSP60 by Simple Western™.** Simple Western lane view shows lysates of Jurkat human acute T cell leukemia cell line and NIH-3T3 mouse embryonic fibroblast cell line, loaded at 0.2 mg/mL. A specific band was detected for HSP60 at approximately 60 kDa (as indicated) using 0.5 µg/mL of Rabbit Anti-Human/Mouse/Rat HSP60 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1800). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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. Heat Shock Protein 60 (HSP60), also known as Chaperonin 60 (CPN60), is a mitochondrial matrix protein belonging to a highly conserved family of molecular chaperone and stress response proteins. HSP60 plays a role in stabilizing and refolding proteins in response to heat-shock or other cellular stress. Full length human HSP60 is 98% identical to mouse and rat HSP60.