

**DESCRIPTION**

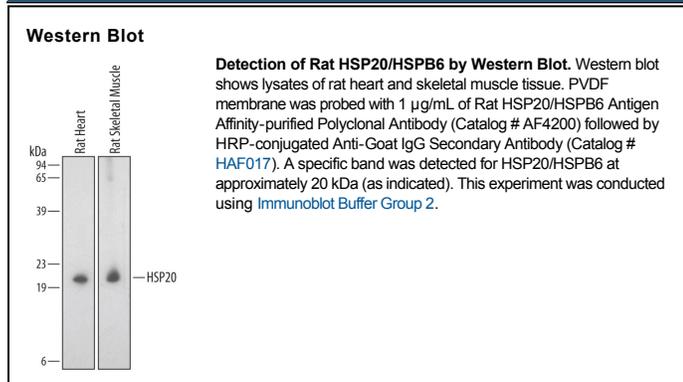
<b>Species Reactivity</b>	Rat
<b>Specificity</b>	Detects endogenous rat HSP20/HSPB6 in Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant rat HSP20/HSPB6 Met1-Lys162 Accession # P97541
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below

**DATA**



**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 protein 20 kDa (HSP20), also known as heat shock protein,  $\alpha$ -crystallin-related, B6 (HSPB6), is a 162 amino acid, 20 kDa member of the small heat shock protein family, which also includes HSP27, HSP25, and the  $\alpha$ -crystallins. Heat shock proteins (HSPs) are a highly conserved family of stress response proteins. HSPs function primarily as molecular chaperones, facilitating the folding of other cellular proteins, preventing protein aggregation, or targeting improperly folded proteins to specific degradative pathways. Heat Shock Proteins are ubiquitously expressed in all organisms. Many HSPs are induced in response to various types of environmental stresses like heat, cold, and oxygen deprivation. Although HSP20 expression does not increase in response to heat stress, HSP20 does translocate from the cytosol to the nucleus. The highest levels of HSP20 are found in skeletal, smooth and cardiac muscle. HSP20 may also be secreted into plasma. Rat HSP20 shares 89 % and 96 % amino acid identity with human and mouse HSP20, respectively.