

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat HSP20/HSPB6 in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 494310
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human HSP20/HSPB6 Met1-Lys160 Accession # O14558
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.

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 protein 20 kDa (HSP20), also known as heat shock protein, alpha-crystallin-related, B6 (HSPB6), is a 160 amino acid, 20 kDa member of the small heat shock protein family, which also includes HSP27, HSP25, and the α -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. HSPs 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 during heat stress. The highest levels of HSP20 are found in skeletal, smooth and cardiac muscle. HSP20 may also be secreted into plasma. Human HSP20 shares 88% and 90% amino acid identity with mouse and rat HSP20, respectively.

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