

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat HSPH1 in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 531104
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human HSPH1 Lys388-Glu505 Accession # Q92598
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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

The 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. They are induced in response to various types of environmental stresses like heat, cold, and oxygen deprivation. Heat shock protein H1 (HSPH1), also known as HSP105 and HSP110, exists as two isoforms, α and β . HSPH1 α consists of 858 amino acids whereas HSPH1 β has 814 amino acids. α and β have calculated molecular weights of 96.4 kDa and 92 kDa, respectively, but an apparent molecular weight of 105-110 kDa in SDS-PAGE. HSPH1 acts as a chaperone to prevent thermal aggregation in mammalian cells. HSPH1 α and β isoforms share 94% identity. Rat HSPH1 has 92% and 97% identity to human and mouse HSPH1, respectively.

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