Human/Mouse/Rat HSPH1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF4029

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat HSPH1. This antibody is predicted to react with HSPH1 α and β isoforms based on sequence identity of the immunogen.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant rat HSPH1 Val595-Asp733 Accession # Q66HA8
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

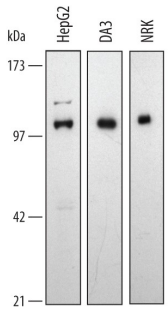
APPLICATIONS

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
Western Blot	0.1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

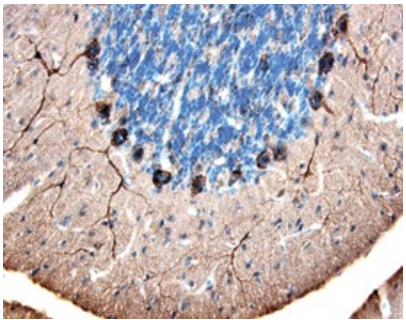
DATA

Western Blot



Detection of Human/Mouse/Rat HSPH1 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line, DA3 mouse myeloma cell line, and NRK rat normal kidney cell line. PVDF membrane was probed with 0.1 µg/mL of Human/Mouse/Rat HSPH1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4029) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for HSPH1 at approximately 105-110 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

Immunohistochemistry



HSPH1 in Rat Brain. HSPH1 was detected in perfusion fixed frozen sections of rat brain (cerebellum) using 5 µg/mL Human/Mouse/Rat HSPH1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4029) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.

PREPARATION 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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
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

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.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449