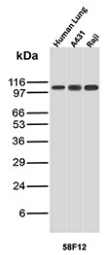
HSPH1 Antibody / Heat Shock Protein Family H Member 1 Antibody [clone r58F12] (V5854)

Catalog No.	Formulation	Size
V5854-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5854-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5854SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

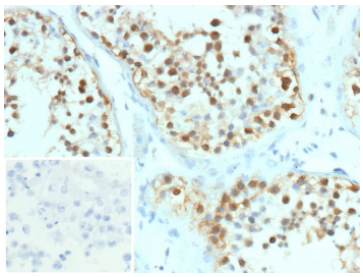
Recombinant | MOUSE MONOCLONAL

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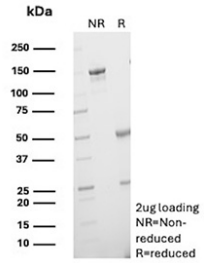
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	r58F12
UniProt	Q92598
Localization	Cytoplasm, Nucleus
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western Blot: 2-4ug/ml
Limitations	This HSPH1 Antibody / Heat Shock Protein Family H Member 1 Antibody is available for research use only.



HSPH1 Antibody Human Lung, A431 and Raji Cell WB. Western blot analysis of human lung tissue, A431 epidermoid carcinoma cells and Raji lymphoma cells was performed with HSPH1 Antibody, also called Heat Shock Protein Family H Member 1 Antibody, clone r58F12. A prominent band is detected at approximately 105 kDa across all tested samples. Although the sequence-predicted molecular weight of HSPH1 is approximately 97 kDa, HSP105 commonly exhibits an apparent molecular weight of approximately 105 kDa by SDS-PAGE. This HSPH1 Antibody demonstrates detection of Heat Shock Protein Family H Member 1 in human tissue and cell lysates.



HSPH1 Antibody Human Testis IHC. Immunohistochemistry staining of FFPE human testis tissue was performed with HSPH1 Antibody, also called Heat Shock Protein Family H Member 1 Antibody, clone r58F12. Nuclear and cytoplasmic staining is observed in a subset of testicular cells, with minimal staining of surrounding stromal elements. Heat-induced epitope retrieval was performed in 10 mM Tris with 1 mM EDTA, pH 9, at 95oC for 45 min followed by cooling at RT for 20 min. The inset shows a secondary-only negative control in which PBS was substituted for the primary antibody.



HSPH1 Antibody r58F12 Purity by SDS-PAGE. SDS-PAGE analysis of purified recombinant mouse monoclonal HSPH1 Antibody clone r58F12 was performed under non-reducing (NR) and reducing (R) conditions with 2 ug of antibody loaded per lane. The non-reduced sample shows the intact antibody at approximately 150 kDa, while reduction produces bands corresponding to the approximately 50 kDa heavy chain and 25 kDa light chain. The results confirm the purity and structural integrity of the recombinant HSPH1 Antibody.

Description

HSPH1 Antibody / Heat Shock Protein Family H Member 1 Antibody recognizes HSPH1, a large molecular chaperone commonly known as HSP105 or HSP110. HSPH1 belongs to the HSP110/HSPH family of heat shock proteins and participates in protein folding, protein quality control and cellular responses to proteotoxic stress. The protein works closely with members of the HSP70 family and is an important component of the molecular chaperone machinery responsible for maintaining cellular proteostasis.

HSPH1 functions as a nucleotide exchange factor for HSP70-family proteins. During the HSP70 chaperone cycle, HSPH1 promotes the release of ADP from HSP70, facilitating nucleotide exchange and continued cycles of substrate binding and release. Through this co-chaperone activity, HSPH1 helps regulate the processing of unfolded and misfolded proteins. HSP110-family proteins can also cooperate with HSP70 and other chaperones in protein disaggregation, helping cells recover proteins from stress-induced aggregates.

Expression of HSPH1 is associated with cellular responses to heat shock and other conditions that disrupt protein homeostasis. Its role in maintaining protein stability has made HSPH1 a target of research into proteotoxic stress, protein aggregation, molecular chaperone networks and mechanisms of cellular adaptation. An HSPH1 Antibody can support studies examining HSP105 expression and distribution as well as the relationship between HSPH1 and HSP70-dependent protein quality control.

HSPH1 is also studied in cancer biology. Tumor cells frequently encounter environmental, metabolic and proteotoxic stresses that increase their dependence on molecular chaperone systems. Altered HSPH1/HSP105 expression has been investigated in several cancer types in relation to tumor cell survival, proliferation, stress resistance and therapeutic response. These studies connect HSPH1 with broader research into how cancer cells maintain protein homeostasis under conditions that challenge normal cellular physiology.

NSJ Bioreagents offers recombinant mouse monoclonal HSPH1 Antibody clone r58F12 for research into HSP105 expression and molecular chaperone biology. A Heat Shock Protein Family H Member 1 Antibody can support research into HSP70-associated chaperone activity, protein folding, proteostasis, cellular stress responses and cancer biology.

Researchers investigating HSP105 function within the HSP70 chaperone network can explore our HSP105 Antibody / HSP70 Co-Chaperone Antibody page for additional reagents targeting HSPH1 in protein folding, proteostasis and cellular stress research.

Application Notes

1. Optimal dilution of the HSPH1 Antibody / Heat Shock Protein Family H Member 1 Antibody should be determined by the researcher.

2. This HSPH1 antibody is recombinantly produced by expression in CHO cells.

Immunogen

Prokaryotic recombinant protein of 31 kD corresponding to the C-terminus of the heat shock protein 105 molecule was used as the immunogen for the HSPH1/Heat shock protein 105 kDa antibody.

Storage

HSPH1/Heat shock protein 105 kDa antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

HSPH1 antibody, Heat Shock Protein Family H Member 1 antibody, HSP105 antibody, Heat Shock Protein 105 antibody, HSP110 antibody, Heat Shock Protein 110 antibody

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