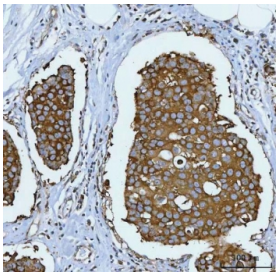
HSP90 alpha/beta Antibody / HSP90AA1 + HSP90AB1 [clone EBD-8] (RQ5187)

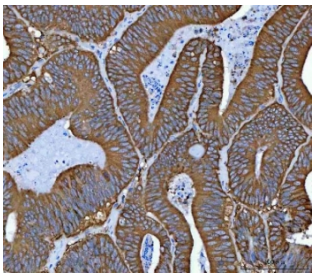
Catalog No.	Formulation	Size
RQ5187	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

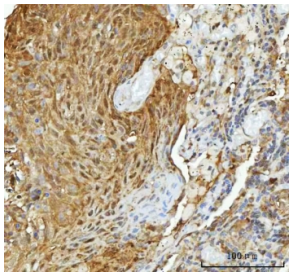
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	EBD-8
Purity	Affinity purified
UniProt	P07900, P08238
Localization	Cell membrane, cytoplasmic, nuclear
Applications	Western Blot : 1:1000-1:2000 Immunohistochemistry (FFPE) : 1:50-1:100 Immunofluorescence : 1:50-1:100
Limitations	This HSP90 alpha/beta Antibody / HSP90AA1 + HSP90AB1 is available for research use only.



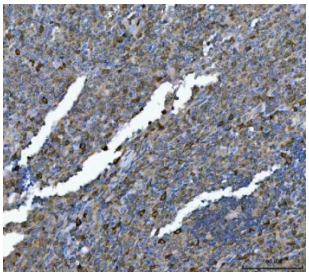
HSP90 alpha/beta Antibody / HSP90AA1 + HSP90AB1 in Human Breast Cancer IHC. Immunohistochemistry staining of FFPE human breast cancer tissue with HSP90 alpha/beta Antibody clone EBD-8. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA for 20 min followed by cooling before testing. Positive HSP90 alpha/beta staining is detected within the tumor tissue.



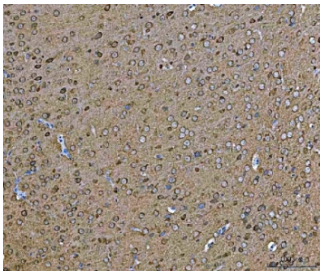
HSP90 alpha/beta Antibody in Human Colorectal Adenocarcinoma IHC. Immunohistochemistry staining of FFPE human colorectal adenocarcinoma tissue with HSP90 alpha/beta Antibody clone EBD-8 shows strong cytoplasmic staining throughout the malignant glandular epithelium. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA for 20 min followed by cooling before testing.



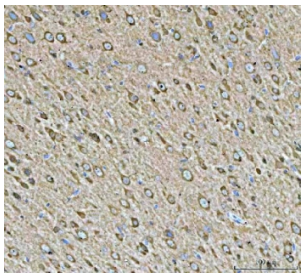
HSP90 alpha/beta Antibody in Human Lung Cancer IHC. Immunohistochemistry staining of FFPE human lung cancer tissue with HSP90 alpha/beta Antibody clone EBD-8 shows widespread cytoplasmic staining of tumor cells, with heterogeneous staining intensity across the section. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA for 20 min followed by cooling before testing.



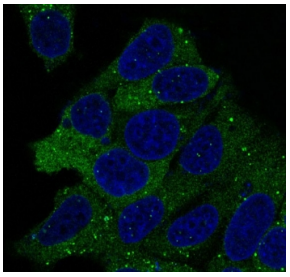
HSP90 alpha/beta Antibody in Human Lymphoma IHC. Immunohistochemistry staining of FFPE human lymphoma tissue with HSP90 alpha/beta Antibody clone EBD-8 shows widespread cytoplasmic staining among the lymphoid cells. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA for 20 min followed by cooling before testing.



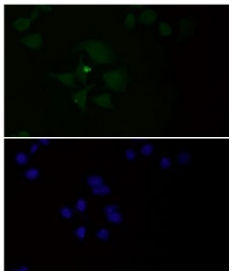
HSP90 alpha/beta Antibody in Mouse Brain IHC. Immunohistochemistry staining of FFPE mouse brain tissue with HSP90 alpha/beta Antibody clone EBD-8 shows diffuse staining throughout the brain parenchyma, including neuronal cell bodies and surrounding neuropil. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA for 20 min followed by cooling before testing.



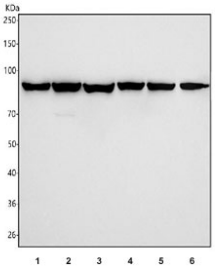
HSP90 alpha/beta Antibody in Rat Brain IHC. Immunohistochemistry staining of FFPE rat brain tissue with HSP90 alpha/beta Antibody clone EBD-8 shows broad staining across the brain parenchyma, including neuronal cell bodies and surrounding neuropil. Heat-induced epitope retrieval was performed by boiling sections in pH 8 EDTA for 20 min followed by cooling before testing.



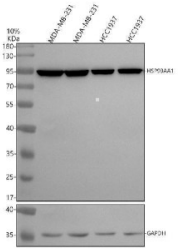
HSP90 alpha/beta Antibody in HeLa Cervical Cancer Cells IF. Immunofluorescence staining of FFPE human HeLa cervical cancer cells with HSP90 alpha/beta Antibody clone EBD-8 detects HSP90 alpha/beta protein (green), while DAPI counterstaining identifies nuclei (blue). Heat-induced epitope retrieval was performed by steaming in pH 6 citrate buffer for 20 min.



HSP90 alpha/beta Antibody in HeLa Cervical Cancer Cells IF. Immunofluorescence staining of FFPE human HeLa cervical cancer cells with HSP90 alpha/beta Antibody clone EBD-8 shows green HSP90 alpha/beta signal predominantly outside the DAPI-stained nuclei, consistent with substantial cytoplasmic localization. Heat-induced epitope retrieval was performed by steaming in pH 6 citrate buffer for 20 min.



HSP90 alpha/beta Antibody Multi-Species Expression WB. Western blot testing of human 293T, U-251 and SiHa cell lysates, rat brain lysate, mouse brain lysate and mouse kidney lysate with HSP90 alpha/beta Antibody clone EBD-8. A strong predominant band is detected at approximately 84-90 kDa in all six lanes, consistent with the expected molecular weight range of cytosolic HSP90 proteins. The results demonstrate detection across human, rat and mouse samples.



HSP90 alpha/beta Antibody in MDA-MB-231 and HCC1937 Breast Cancer Cells WB. Western blot testing of human MDA-MB-231 and HCC1937 breast cancer cell lysates with HSP90 alpha/beta Antibody shows a strong, specific band at approximately 90 kDa, consistent with the expected molecular weight of HSP90AA1. Samples were separated on an 8% SDS-PAGE gel under reducing conditions, transferred to nitrocellulose, and probed with the antibody at 0.5 ug/ml overnight at 4oC. GAPDH at approximately 35 kDa serves as a loading control and shows comparable protein loading across the four lanes.

Description

HSP90 alpha/beta Antibody / HSP90AA1 + HSP90AB1 recognizes members of the cytosolic heat shock protein 90 family, an abundant class of ATP-dependent molecular chaperones involved in protein folding, stabilization, maturation, and cellular stress responses. The two major cytosolic HSP90 isoforms are HSP90 alpha, encoded by HSP90AA1, and HSP90 beta, encoded by HSP90AB1. These closely related proteins share extensive sequence and structural similarity but differ in aspects of their expression and regulation.

HSP90 alpha is generally considered the more stress-inducible cytosolic isoform, whereas HSP90 beta is expressed more constitutively. Both proteins function as molecular chaperones for a diverse collection of client proteins. HSP90 activity is coordinated with co-chaperones and other heat shock proteins to maintain protein homeostasis, assist conformational maturation, and protect cells from the accumulation of improperly folded proteins.

The HSP90 chaperone system participates in numerous signaling pathways by stabilizing proteins involved in cell proliferation, survival, transcription, and signal transduction. Its client proteins include protein kinases, transcription factors, steroid hormone receptors, and other regulatory molecules. ATP binding and hydrolysis drive conformational changes within the HSP90 chaperone cycle, while co-chaperones influence client recognition, ATPase activity, and progression through different stages of protein maturation.

HSP90AA1 and HSP90AB1 have substantial functional overlap, but their regulation is not identical. Increased HSP90 alpha expression is associated particularly with cellular responses to heat and other forms of stress, while HSP90 beta contributes to basal proteostasis and essential cellular functions. The abundance and broad client network of the HSP90 family have also made these molecular chaperones important subjects in cancer biology, where HSP90 can support the stability of signaling proteins required by malignant cells.

An HSP90 alpha/beta Antibody capable of recognizing HSP90AA1 and HSP90AB1 provides a means of investigating the closely related cytosolic HSP90 proteins without restricting detection to a single isoform. Studies of HSP90 biology can

contribute to research into proteostasis, cellular stress, molecular chaperone activity, signal transduction, protein folding, and cancer-associated signaling.

NSJ Bioreagents offers clone EBD-8 as a rabbit monoclonal reagent for researchers studying the cytosolic HSP90 chaperone system. An HSP90 alpha/beta Antibody can support investigation of HSP90AA1 and HSP90AB1 in studies of protein homeostasis, cellular stress responses, and chaperone-dependent signaling.

Explore our Signal Transduction Antibodies page for additional reagents targeting proteins involved in intracellular signaling and regulatory pathways.

Application Notes

Optimal dilution of the HSP90 alpha/beta Antibody / HSP90AA1 + HSP90AB1 should be determined by the researcher.

Immunogen

A synthetic peptide specific to human HSP90 alpha/beta was used as the immunogen for the HSP90 alpha/beta antibody.

Storage

Store the HSP90 alpha/beta antibody at -20oC.

Alternate Names

HSP90AA1 antibody, HSP90AB1 antibody, HSP90 alpha antibody, HSP90 beta antibody, Heat shock protein HSP 90-alpha antibody, Heat shock protein HSP 90-beta antibody, HSP90A antibody, HSP90B antibody

Copyright © NSJ Bioreagents. All rights reserved.