Anti-HSP90 Beta Antibody [2-1-G3]

EM21103

Product Type:	Mouse monoclonal IgG2a, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 83 kDa
Clone number:	2-1-G3

Description: Heat shock protein HSP 90-beta also called HSP90beta is a protein that in humans is encoded by the HSP90AB1 gene. HSP90AB1 is a molecular chaperone. Chaperones are proteins that bind to other proteins, thereby stabilizing them in an ATP-dependent manner. Chaperones stabilize new proteins during translation, mature proteins which are partially unstable but also proteins that have become partially denatured due to various kinds of cellular stress. In case proper folding or refolding is impossible, HSPs mediate protein degradation. They also have specialized functions, such as intracellular transport into organelles.

Immunogen: Synthetic peptide within Human HSP90 Beta aa 311-360 / 724.

Positive control: HeLa cell lysate, HepG2 cell lysate, A549 cell lysate, K-562 cell lysate, Jurkat cell lysate, NIH/3T3 cell lysate, C6 cell lysate, PC-12 cell lysate, mouse brain tissue lysate, mouse heart tissue lysate, rat brain tissue lysate, human brain tissue, rat brain tissue, human colon carcinoma tissue, human tonsil tissue, mouse testis tissue, mouse brain tissue.

Subcellular location: Cytoplasm

Database links: SwissProt: P08238 Human | P11499 Mouse | P34058 Rat

Recommended Dilutions:

WB	1:1,000-1:5,000
IHC-P	1:500-1:10,000

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

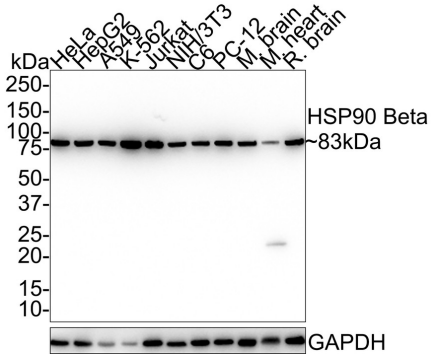

Fig1: Western blot analysis of HSP90 Beta on different lysates with Mouse anti-HSP90 Beta antibody (EM21103) at 1/1,000 dilution.

Lane 1: HeLa cell lysate (20 µg/Lane)
Lane 2: HepG2 cell lysate (20 µg/Lane)
Lane 3: A549 cell lysate (20 µg/Lane)
Lane 4: K-562 cell lysate (20 µg/Lane)
Lane 5: Jurkat cell lysate (20 µg/Lane)
Lane 6: NIH/3T3 cell lysate (20 µg/Lane)
Lane 7: C6 cell lysate (20 µg/Lane)
Lane 8: PC-12 cell lysate (20 µg/Lane)
Lane 9: Mouse brain tissue lysate (40 µg/Lane)
Lane 10: Mouse heart tissue lysate (40 µg/Lane)
Lane 11: Rat brain tissue lysate (40 µg/Lane)

Predicted band size: 83 kDa
Observed band size: 83 kDa

Exposure time: 53 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (EM21103) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/100,000 dilution was used for 1 hour at room temperature.

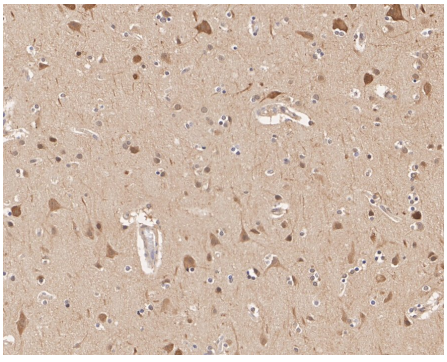

Fig2: Immunohistochemical analysis of paraffin-embedded human brain tissue with Mouse anti-HSP90 Beta antibody (EM21103) at 1/10,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (EM21103) at 1/10,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

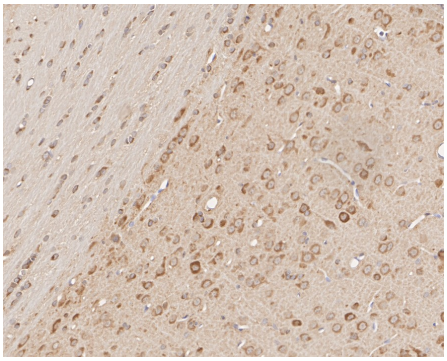

Fig3: Immunohistochemical analysis of paraffin-embedded rat brain tissue with Mouse anti-HSP90 Beta antibody (EM21103) at 1/10,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (EM21103) at 1/10,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

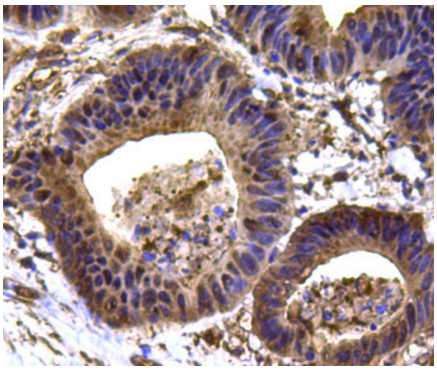

Fig4: Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using anti-HSP90 beta antibody. Counter stained with hematoxylin.

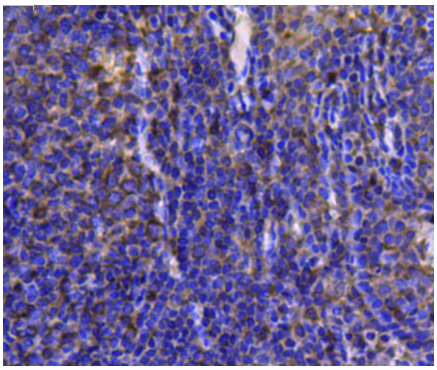

Fig5: Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-HSP90 beta antibody. Counter stained with hematoxylin.

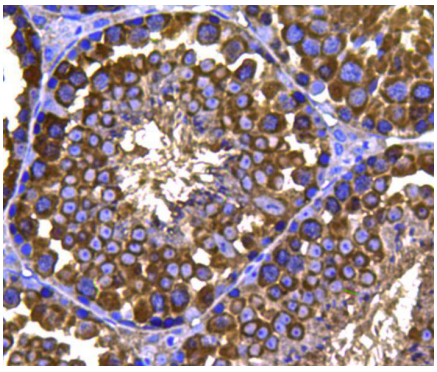

Fig6: Immunohistochemical analysis of paraffin-embedded mouse testis tissue using anti-HSP90 beta antibody. Counter stained with hematoxylin.

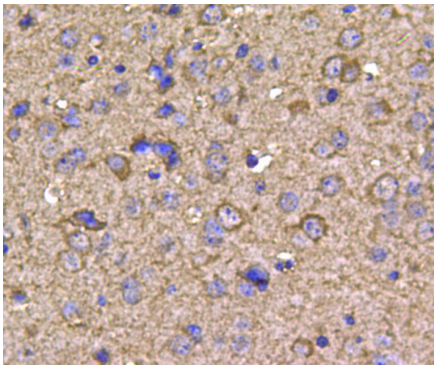

Fig7: Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-HSP90 beta antibody. Counter stained with hematoxylin.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. "Hsp90 is regulated by a switch point in the C-terminal domain."Retzlaff M., Stahl M., Eberl H.C., Lagleder S., Beck J., Kessler H., Buchner J.EMBO Rep. 10:1147-1153(2009).
2. "GCUNC-45 is a novel regulator for the progesterone receptor/hsp90 chaperoning pathway."Chadli A., Graham J.D., Abel M.G., Jackson T.A., Gordon D.F., Wood W.M., Mol. Cell. Biol. 26:1722-1730(2006)