

hsp90a.1 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # Azb18696c

Specification

hsp90a.1 Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q90474
Reactivity	Zebrafish
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	83319
Antigen Region	229-263

hsp90a.1 Antibody (Center) - Additional Information

Gene ID 30591

Other Names

Heat shock protein HSP 90-alpha 1, hsp90a1, hsp90, hsp90a, hsp90aa1

Target/Specificity

This hsp90a.1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 229-263 amino acids from the Central region of human (DANRE) hsp90a.1.

Dilution

WB~~1:2000

IHC-P~~1:25

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

hsp90a.1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

hsp90a.1 Antibody (Center) - Protein Information

Name hsp90a.1

Synonyms hsp90, hsp90a, hsp90aa1

Function Molecular chaperone that promotes the maturation, structural maintenance and proper regulation of specific target proteins involved for instance in cell cycle control and signal transduction. Undergoes a functional cycle that is linked to its ATPase activity which is essential for its chaperone activity. This cycle probably induces conformational changes in the client proteins, thereby causing their activation. Interacts dynamically with various co-chaperones that modulate its substrate recognition, ATPase cycle and chaperone function. Engages with a range of client protein classes via its interaction with various co-chaperone proteins or complexes, that act as adapters, simultaneously able to interact with the specific client and the central chaperone itself. Recruitment of ATP and co-chaperone followed by client protein forms a functional chaperone. After the completion of the chaperoning process, properly folded client protein and co-chaperone leave HSP90 in an ADP-bound partially open conformation and finally, ADP is released from HSP90 which acquires an open conformation for the next cycle (By similarity). Plays a key role in slow and fast muscle development in the embryo. Plays a role in myosin expression and assembly (PubMed:[10364427](#), PubMed:[17586488](#), PubMed:[18182494](#), PubMed:[18256191](#)).

Cellular Location

Melosome {ECO:0000250|UniProtKB:P07900}. Cytoplasm, myofibril, sarcomere, Z line
Cytoplasm, myofibril, sarcomere, A band Cytoplasm, perinuclear region Note=Expressed at the Z line and in the perinuclear region of myofibrils. Shuttles between the Z line and A band in response to stress conditions and fibril damage

Tissue Location

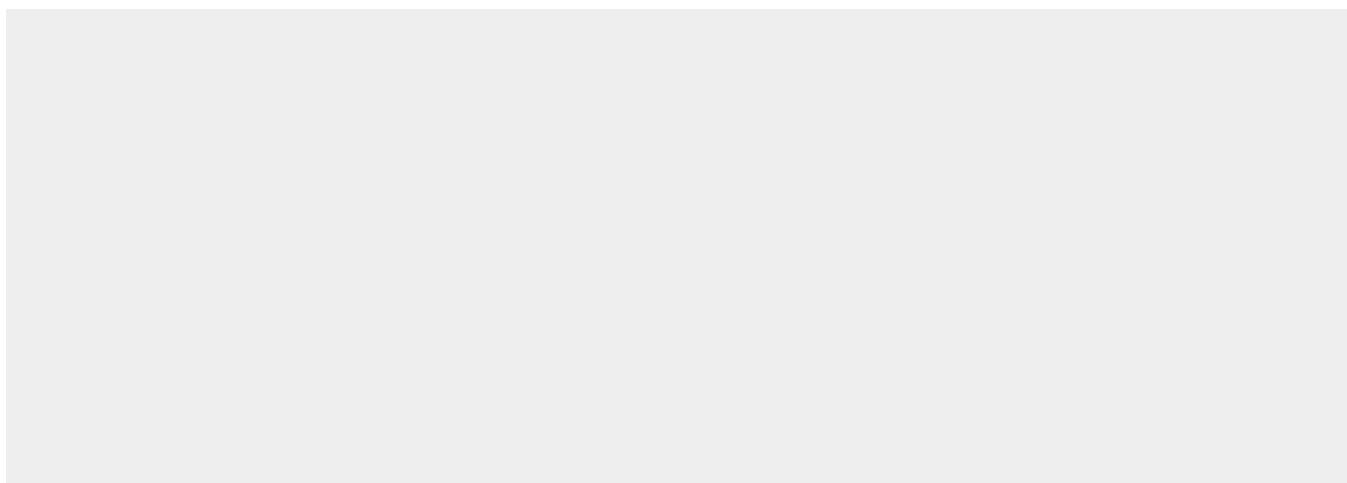
Strongly expressed in the early embryos within the somitic slow muscle progenitors, the adaxial cells that lie on either side of the notochord but not the notochord. Also expressed during the early differentiation of fast fibers. Detected in developing cardiac muscles and pectoral fin primordia. Not detected in mature muscle fibers.

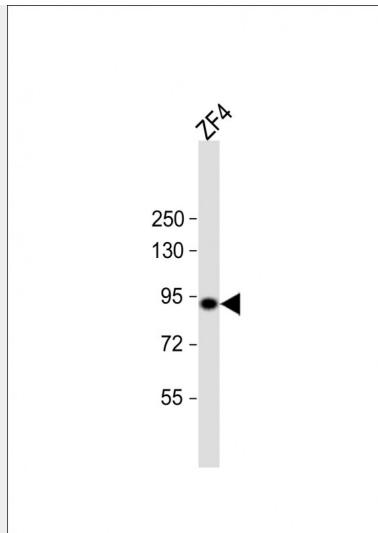
hsp90a.1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

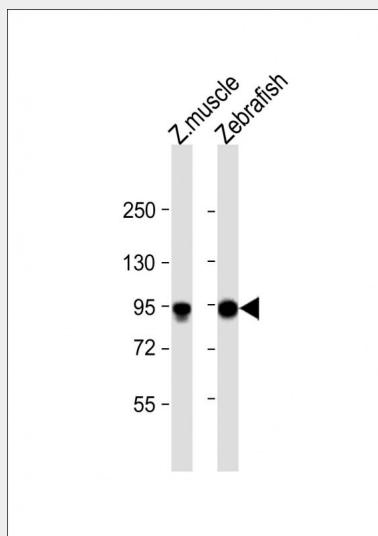
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

hsp90a.1 Antibody (Center) - Images

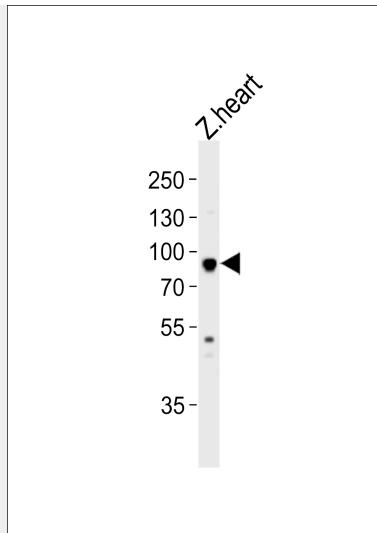




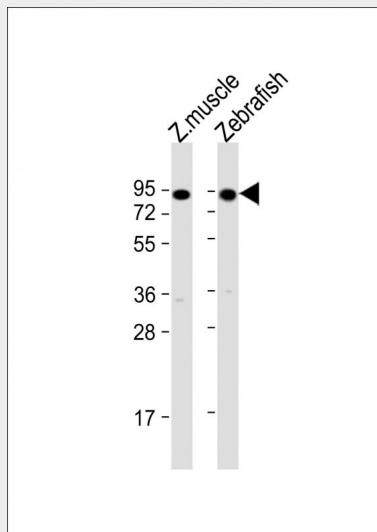
Anti-hsp90a. 1 Antibody (Center) at 1:2000 dilution + ZF4 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



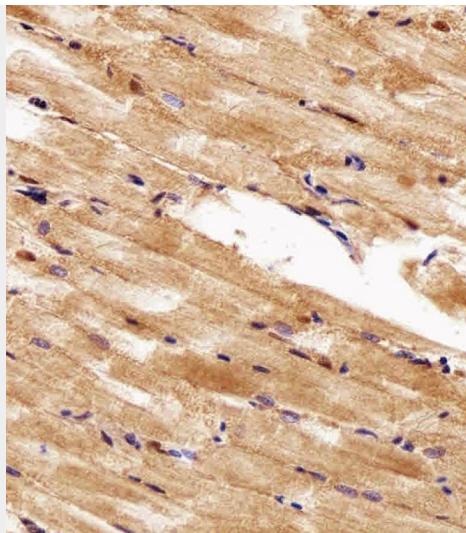
All lanes : Anti-hsp90a. 1 Antibody (Center) at 1:2000 dilution Lane 1: Zebrafish muscle lysate
Lane 2: Zebrafish lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of lysate from zebra fish heart tissue lysate, using (DANRE) hsp90a. 1 Antibody (Center) (Cat. #Azb18696c). Azb18696c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



All lanes : Anti-hsp90a. 1 Antibody (Center) at 1:2000 dilution Lane 1: Zebrafish muscle lysate Lane 2: Zebrafish lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded *Z.* skeletal muscle section using hsp90a.1 Antibody (Center)(Cat#Azb18696c). Azb18696c was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

hsp90a.1 Antibody (Center) - Background

Molecular chaperone that promotes the maturation, structural maintenance and proper regulation of specific target proteins involved for instance in cell cycle control and signal transduction. Undergoes a functional cycle that is linked to its ATPase activity. This cycle probably induces conformational changes in the client proteins, thereby causing their activation. Interacts dynamically with various co-chaperones that modulate its substrate recognition, ATPase cycle and chaperone function (By similarity). Plays a key role in slow and fast muscle development in the embryo. Plays a role in myosin expression and assembly.

hsp90a.1 Antibody (Center) - References

- Lele Z.,et al.Dev. Biol. 210:56-70(1999).
- Etard C.,et al.Dev. Biol. 308:133-143(2007).
- Etard C.,et al.J. Cell Biol. 180:1163-1175(2008).
- Howe K.,et al.Nature 496:498-503(2013).
- Krone P.H.,et al.Biochem. Biophys. Res. Commun. 204:746-752(1994).