

**Tsp23 Antibody**  
**TSP23 Antibody, Clone Tsp232A**  
**Catalog # ASM10142**

**Specification**

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**Tsp23 Antibody - Product Information**

Application	<b>IHC, WB</b>
Primary Accession	<a href="#">B9A003</a>
Other Accession	<a href="#">NP_001136126.1</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1 Kappa</b>
Reactivity	<b>Human, Mouse</b>
Clonality	<b>Monoclonal</b>

**Description**

Mouse Anti-Human Tsp23 Monoclonal IgG1 Kappa

**Target/Specificity**

Detects ~19kDa. Detects Tsp23, no cross-reactivity to p23.

**Other Names**

Transcript similar p23 Antibody, AARSD1 Antibody, AASD1\_HUMAN Antibody, Alanyl-tRNA editing protein Aarsd1 Antibody, Alanyl-tRNA synthetase domain containing 1 Antibody, Alanyl-tRNA synthetase domain-containing protein 1 Antibody, MGC2744 Antibody, OTTHUMP00000204017 Antibody, OTTHUMP00000204019 Antibody, OTTHUMP00000204020 Antibody

**Immunogen**

Recombinant tsp23

**Purification**

Protein G Purified

Storage **-20°C**

**Storage Buffer**

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4°C**

**Certificate of Analysis**

1 µg/ml of SMC-194 was sufficient for detection of tsp23 in 20 µg of transiently transfected Hela cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Cytoplasm

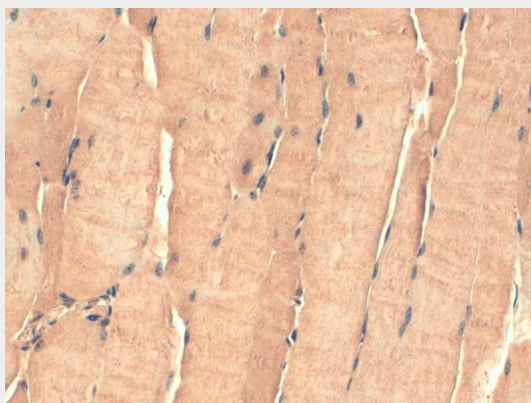
**Tsp23 Antibody - Protocols**

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

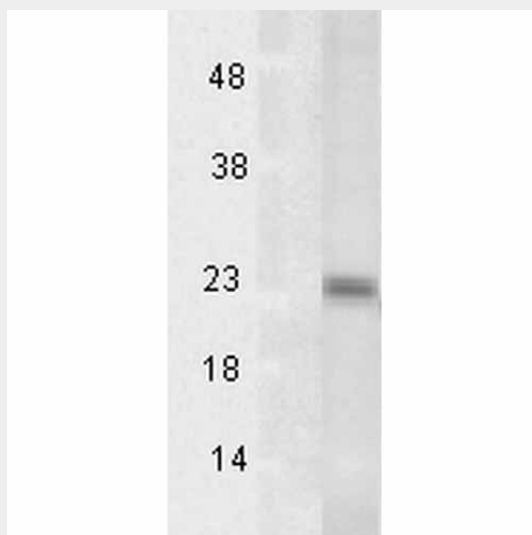
- [Western Blot](#)

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

### Tsp23 Antibody - Images



Immunohistochemistry analysis using Mouse Anti-Tsp23 Monoclonal Antibody, Clone TSp232A (ASM10142). Tissue: Heart Skeletal Muscle. Species: Mouse. Fixation: 10% Formalin Solution for 12-24 hours at RT. Primary Antibody: Mouse Anti-Tsp23 Monoclonal Antibody (ASM10142) at 1:1000 for 1 hour at RT. Secondary Antibody: HRP/DAB Detection System: Biotinylated Goat Anti-Mouse, Streptavidin Peroxidase, DAB Chromogen (brown) for 30 minutes at RT. Counterstain: Mayer Hematoxylin (purple/blue) nuclear stain at 250-500  $\mu$ l for 5 minutes at RT.



Western Blot analysis of Human Heat Shocked HeLa cell lysates showing detection of Tsp23 protein using Mouse Anti-Tsp23 Monoclonal Antibody, Clone TSp232A (ASM10142). Load: 15  $\mu$ g. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-Tsp23 Monoclonal Antibody (ASM10142) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

### Tsp23 Antibody - Background

p23 is a highly conserved ubiquitous protein, known to have an important function as a

cochaperone for the HSP90 chaperoning system (1). Studies have revealed that p23 is a small protein (18 to 25 kDa) with a simple structure (2, 3). p23 is a phosphor-protein, which is highly acidic and has an aspartic acid-rich c-terminal domain (1). Numerous studies have found p23 to be associated with other client proteins like Fes tyrosine kinase (4), the heme regulated kinase HRI (5), hsf1 transcription factor (4), aryl hydrocarbon receptor (4), telomerase (6), and Hepadnavirus reverse transcriptase (7). In spite of several years of study, the exact functional significance of p23 is still not clear (8). p23 is thought to be involved in the adenosine triphosphate-mediated HSP90 binding of client proteins (8). Since many HSP90 client proteins are involved in oncogenic survival signaling, a recent study has concluded p23 to be a promising target in leukemic apoptosis (9). HSP90 and its co-chaperone p23 are certainly among the emerging anti-tumor targets in oncology. Specifically TSP23 (transcript similar p23) displays 44% and 17% amino acid identity with p23 and Sba1p respectively (10).

### **Tsp23 Antibody - References**

1. Johnson J.L., Beito T. G., Krco C.J., Toft D.O. (1994) *Mol Cell Biol* 14: 1956-63.
2. Weikl T., Abelmann K., Buchner J. (1999) *J Mol Biol* 293: 685-91.
3. Weaver A.J., Sullivan W.P., Felts S.J., Owen B.A., Toft D.O. (2000) *J Biol Chem* 275: 23045-52.
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5. Xu Z., et al. (1997) *Eur J Biochem* 246, 461-70.
6. Holt S.E., et al. (1999) *Genes Dev* 13: 817-26.
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8. Felts, S.J., Toft D.O. (2003) *Cell Stress Chaperones*.8: 108-13.
9. Gausdal G., Gjertsen B.T., Fladmark K.E., Demol H., Vandekerckhove J. & Doskeland S.O. (2004) *Leukemia*
10. Freeman B.C., Felts S.J., Toft D.O., Yamamoto K.R. (2000) *Genes Dev.* 14(4): 433-434.