10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

Tsp23 Antibody
TSP23 Antibody, Clone Tsp232A
Catalog # ASM10142

Specification

Tsp23 Antibody - Product Information

Application	**IHC, WB**
Primary Accession	B9A003
Other Accession	NP_001136126.1
Host	**Mouse**
Isotype	**IgG1 Kappa**
Reactivity	**Human, Mouse**
Clonality	**Monoclonal**

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

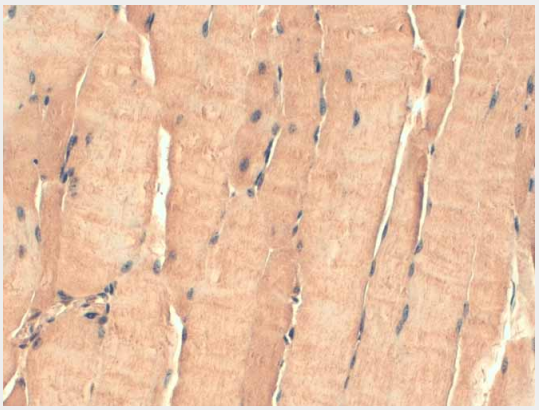
Purification
Protein G Purified

Storage	**-20ºC**

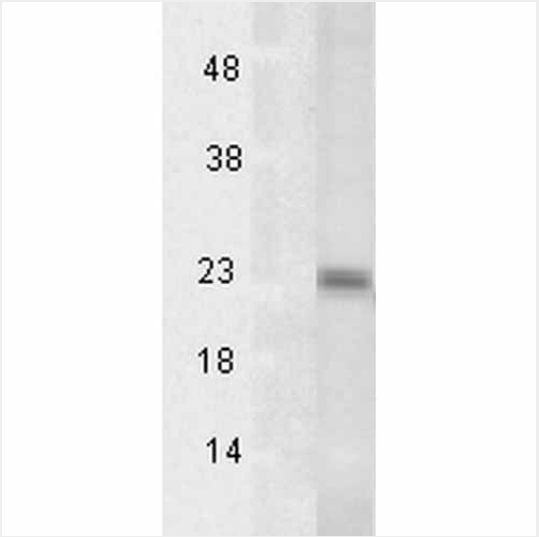
Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

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.



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 µl for 5 minutes at RT.



Western Blot analysis of Human Heat

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 Cytomety
- Cell Culture

Shocked HeLa cell lysates showing detection of Tsp23 protein using Mouse Anti-Tsp23 Monoclonal Antibody, Clone TSp232A (ASM10142). Load: 15 µg. 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.
4. Nair S.C., et al. (1996) Cell Stress Chaperones 1: 237-50.
5. Xu Z., et al. (1997) Eur J Biochem 246, 461-70.
6. Holt S.E., et al. (1999) Genes Dev 13:

817-26.
7. Hu J., Toft D., Anselmo D., Wang X. (2002) J Virol 76: 269-79.
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., Yamamato K.R. (2000) Genes Dev. 14(4): 433-434.