

p23 Antibody p23 Antibody, Clone JJ6 Catalog # ASM10082

Specification

Reactivity

p23 Antibody - Product Information

Application ICC/IF, IHC, WB

Primary Accession
Other Accession
Host
Isotype

O15185
NP_006592.3
Mouse
IgG1

Human, Mouse, Rabbit, Chicken, Yeast, Guinea Pig Monoclonal

Clonality **Description**

Mouse Anti-Human p23 Monoclonal IgG1

Target/Specificity Detects ~23kDa.

Other Names

co chaperone p23 Antibody, PTGES3
Antibody, TEBP Antibody, telomerase
binding protein p23 Antibody, unactive
progesterone receptor 23kDa Antibody,
HSP90 co-chaperone Antibody,
Progesterone receptor complex p23
Antibody, Cytosolic prostaglandin E2
synthase Antibody

Immunogen

Recombinant human full length p23 protein

PurificationProtein G Purified

Storage -20°C

Storage Buffer

PBS, 50% glycerol, 0.09% sodium azide

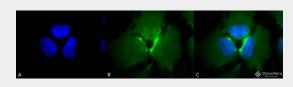
Shipping Blue Ice or 4ºC

Temperature Certificate of Analysis

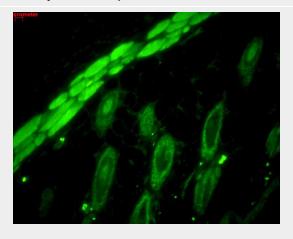
 $0.5~\mu g/ml$ of SMC- $15\acute{6}$ was sufficient for detection of p23 in 20 μg of heat shocked cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

Cytoplasm



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-p23 Monoclonal Antibody, Clone JJ6 (ASM10082). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Mouse Anti-p23 Monoclonal Antibody (ASM10082) at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-p23 Antibody. (C) Composite.



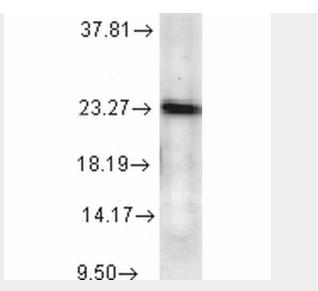
Immunohistochemistry analysis using Mouse Anti-p23 Monoclonal Antibody, Clone JJ6 (ASM10082). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-p23 Monoclonal Antibody (ASM10082) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Epidermal, dermal, HF, muscle staining. Bright dermal staining.



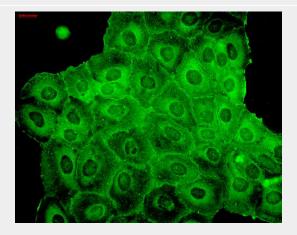
p23 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cvtometv
- Cell Culture

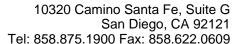


Western Blot analysis of Human Cell lysates showing detection of p23 protein using Mouse Anti-p23 Monoclonal Antibody, Clone JJ6 (ASM10082). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-p23 Monoclonal Antibody (ASM10082) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-p23 Monoclonal Antibody, Clone JJ6 (ASM10082). Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-p23 Monoclonal Antibody (ASM10082) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Uniform epidermal staining – some evidence of cell-cell borders.

p23 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 does not have any structural homology with any other known proteins (1). p23 was first discovered as a part of the HSP90-progesterone receptor complex along with HSP70, p54 and p50 (1). 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.

p23 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.