# P23 (JJ12): sc-101497



The Power to Question

# **BACKGROUND**

P23, also known as PTGES3 (prostaglandin E synthase 3) or TEBP (telomerase-binding protein p23), is a ubiquitously expressed protein that functions as a cochaperone and plays an important role in signal transduction. One of several proteins in the HSP 90-based molecular chaperone complex, P23 promotes the breakdown of transcriptional regulatory complexes by disrupting receptor-mediated transcriptional activation. P23 acts in a hormone-dependent manner to chaperone estrogen receptor  $\alpha$  (ER $\alpha$ ), a steroid complex, to its mature form and to regulate the expression of ER $\alpha$ -related genes. Localized to the cytoplasm, P23 interacts with the glucocorticoid receptor (GR) and, through disassembly of the GR transcription machinery, is thought to inhibit GR-dependent transcription. The involvement of P23 in various steroid receptor-mediated pathways suggests close involvement in signal transduction and regulation of cellular processes. Upregulation of P23 is implicated in the invasion and metastasis of various cancers.

# **REFERENCES**

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# **CHROMOSOMAL LOCATION**

Genetic locus: PTGES3 (human) mapping to 12q13.3; Ptges3 (mouse) mapping to 10 D3.

#### **SOURCE**

P23 (JJ12) is a mouse monoclonal antibody raised against P23 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$   $lgG_{2b}$  in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

# **APPLICATIONS**

P23 (JJ12) is recommended for detection of P23 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for P23 siRNA (h): sc-62741, P23 siRNA (m): sc-62742, P23 shRNA Plasmid (h): sc-62741-SH, P23 shRNA Plasmid (m): sc-62742-SH, P23 shRNA (h) Lentiviral Particles: sc-62741-V and P23 shRNA (m) Lentiviral Particles: sc-62742-V.

Molecular Weight of P23: 23 kDa.

Positive Controls: A549 cell lysate: sc-2413, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

# **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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