**BACKGROUND**

Retinoic acid-induced protein 3 (RAI3) is a transmembrane G protein-coupled receptor that affects many essential biological processes including embryogenesis, cell growth, differentiation, and apoptosis. RAI3 may also be involved in maintaining homeostasis of epithelial cells. Retinoic acid receptors directly regulate RAI3 during its transcription in embryonal carcinoma differentiation. RAI3 expression is upregulated in most tumor cell lines that express mutant p53, suggesting that p53 interacts with the promoter of RAI3 and represses its expression at the beginning of apoptosis. RAI3 is a potential molecular target for diagnosing breast cancer, and selective suppression of signals from RAI3 may have a place in breast cancer treatments.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: GPRC5A (human) mapping to 12p13.1; Gprc5a (mouse) mapping to 6 G1.

**SOURCE**

RAI3 (A-11) is a mouse monoclonal antibody raised against amino acids 237-356 mapping at the C-terminus of RAI3 of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLIED USE**

RAI3 (A-11) is recommended for detection of RAI3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RAI3 siRNA (h): sc-61440, RAI3 siRNA (m): sc-61441, RAI3 shRNA Plasmid (h): sc-61440-SH, RAI3 shRNA Plasmid (m): sc-61441-SH, RAI3 shRNA (h) Lentiviral Particles: sc-61440-V and RAI3 shRNA (m) Lentiviral Particles: sc-61441-V.

Molecular Weight of RAI3: 32 kDa.

Positive Controls: RAI3 (h): 293T Lysate: sc-158912.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

**DATA**

**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.