

# A-10 Whole Cell Lysate: sc-3806

## BACKGROUND

Santa Cruz Biotechnology offers a variety of whole cell lysates for use in combination with our antibodies as Western Blotting controls. A-10 Whole Cell Lysate is derived from the A-10 cell line using a procedure that ensures protein integrity and lot-to-lot reproducibility. All lysates are tested by Western Blotting to assure that each one contains the expected concentration and assortment of proteins. Numerous antibodies directed against a wide array of mammalian proteins are used to test each lysate.

The clonal cell line A-10 was derived by B. Kimes and B. Brandt from the thoracic aorta of DB1X embryonic rat and possesses many of the properties characteristic of smooth muscle cells. The cells produce spontaneous action potentials at the stationary phase of the growth cycle and exhibit an increase in activity of the enzymes myokinase and creatine phosphokinase.

## REFERENCES

1. Kimes, B.W. and Brandt, B.L. 1976. Characterization of two putative smooth muscle cell lines from rat thoracic aorta. *Exp. Cell Res.* 98: 349-366.
2. Gordon, E.M., Venkatesan, N., Salazar, R., Tang, H., Schmeidler-Sapiro, K., Buckley, S., Warburton, D. and Hall, F.L. 1996. Factor XII-induced mitogenesis is mediated via a distinct signal transduction pathway that activates a mitogen-activated protein kinase. *Proc. Natl. Acad. Sci. USA* 93: 2174-2179.
3. Zhang, X., Minale, L., Zampella, A. and Smith, C.D. 1997. Microfilament depletion and circumvention of multiple drug resistance by sphinxolides. *Cancer Res.* 57: 3751-3758.

## SOURCE

A-10 Whole Cell Lysate is derived from the A-10 cell line.

Organism: *Rattus norvegicus* (rat)  
Strain: DB1X  
Organ: Aorta, thoracic  
Tissue: Medial layer  
Morphology: Myoblast  
Growth Properties: Adherent

## PRODUCT

Each vial contains 500 µg protein in 200 µl of an SDS-PAGE Western Blotting buffer, which consists of 100 µl RIPA Lysis Buffer and 100 µl Electrophoresis Buffer, 2X.

## APPLICATIONS

A-10 Whole Cell Lysate is provided as a Western Blotting positive control. Recommended use is 50 µg (20 µl) per lane. Sample vial should be boiled once prior to use.

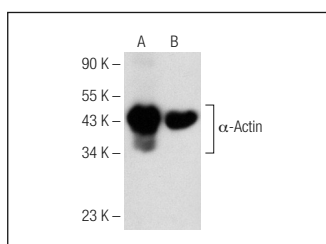
## STORAGE

Store at -20° C; stable for one year from the date of shipment. Non-hazardous. No MSDS required. Minimize repeated freezing and thawing.

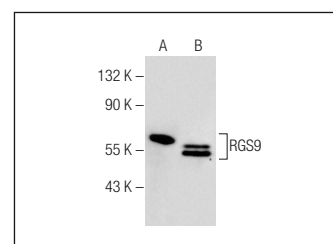
## PREPARATION METHOD

Cells are cultured with appropriate media conditions and allowed to reach a confluency of 75%. Cells are lysed using the RIPA Lysis Buffer System (sc-24948). The BCA Protein Assay Kit (sc-202389) is used to determine the total protein concentration. The lysate is adjusted to contain 500 µg of total cellular protein in 100 µl before adding an equal volume of Electrophoresis Sample Buffer, 2X (sc-24945). Final concentration of product is 500 µg total protein in a final volume of 200 µl.

## DATA



$\alpha$ -Actin (1A4): sc-32251. Western blot analysis of  $\alpha$ -Actin expression in A-10 (A) and NIH/3T3 (B) whole cell lysates.



RGS9 (C-8): sc-377252. Western blot analysis of RGS9 expression in rat eye tissue extract (A) and A-10 whole cell lysate (B).

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.