

# Calgizzarin (FL-105): sc-98427

## BACKGROUND

Calgizzarin is a Ca<sup>2+</sup>-binding protein of the S-100 family. The proteins comprising the S-100 protein family have two EF-hand structures per molecule of protein. Expression of these family members occurs primarily in neurons or retinal photoreceptor cells, and may also be involved in a wide variety of cellular functions including cell growth, cell-cell communication, energy metabolism and intracellular signal transduction. They have also been linked to various pathologies, including Alzheimer's disease, schizophrenia and cancer. Calgizzarin is highly expressed in lung tissue and is also expressed in kidney, liver, brain, heart and smooth muscle. It is an important androgen-responsive protein produced by Sertoli cells and might play a role in spermatogenesis regulation.

## REFERENCES

- Zimmer, D.B., et al. 1995. The S-100 protein family: history, function, and expression. *Brain Res. Bull.* 37: 417-429.
- Allen, B.G., et al. 1997. Characterization of the Ca<sup>2+</sup>-binding properties of Calgizzarin (S-100C) isolated from chicken gizzard smooth muscle. *Biochem. Cell Biol.* 74: 687-694.

## CHROMOSOMAL LOCATION

Genetic locus: S100A11 (human) mapping to 1q21.3; S100a11 (mouse) mapping to 3 F2.1.

## SOURCE

Calgizzarin (FL-105) is a rabbit polyclonal antibody raised against amino acids 1-105 representing full length Calgizzarin of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## RESEARCH USE

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

## APPLICATIONS

Calgizzarin (FL-105) is recommended for detection of Calgizzarin 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 Calgizzarin siRNA (h): sc-60314, Calgizzarin siRNA (m): sc-60315, Calgizzarin shRNA Plasmid (h): sc-60314-SH, Calgizzarin shRNA Plasmid (m): sc-60315-SH, Calgizzarin shRNA (h) Lentiviral Particles: sc-60314-V and Calgizzarin shRNA (m) Lentiviral Particles: sc-60315-V.

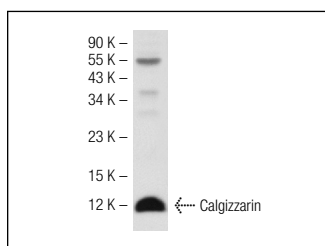
Molecular Weight of Calgizzarin: 13 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

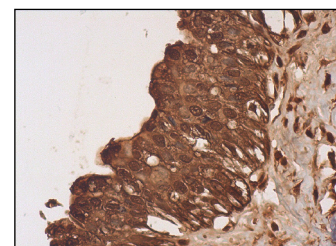
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



Calgizzarin (FL-105): sc-98427. Western blot analysis of Calgizzarin expression in HeLa whole cell lysate.



Calgizzarin (FL-105): sc-98427. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic and nuclear staining of urothelial cells.

## SELECT PRODUCT CITATIONS

- Feng, H., et al. 2010. Protein profile in HBx transfected cells: a comparative iTRAQ-coupled 2D LC-MS/MS analysis. *J. Proteomics* 73: 1421-1432.
- Wang, M., et al. 2010. Proteomic profiling of cellular responses to Carvedilol enantiomers in vascular smooth muscle cells by iTRAQ-coupled 2-D LC-MS/MS. *J. Proteomics* 73: 1601-1611.

## STORAGE

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

## PROTOCOLS

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



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Try **Calgizzarin (B-5): sc-390250** or **Calgizzarin (84-S): sc-130401**, our highly recommended monoclonal alternatives to Calgizzarin (FL-105).