

# SMOC-1 (F-3): sc-133150

## BACKGROUND

SMOC-1 (SPARC-related modular calcium-binding protein-1) is a secreted modular calcium-binding protein found in the extracellular space in or around the basement membrane. SMOC-1 is a member of the BM-40 family and contains two EF-hand domains, one Kazal-like domain and two Thyroglobulin type-1 domains. The BM-40 family has been implicated with tissue remodeling, angiogenesis and bone mineralization. In embryonic stage day 12, and fetal stages day 14, 16 and 18, the SMOC-1 protein is present in the basement membrane zones of brain, blood vessels, skin, skeletal muscle, lung, heart, liver, pancreas, ovary, intestine and kidney. This broad and organ-specific distribution suggests multifunctional roles of SMOC-1 during embryogenesis.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SMOC1 (human) mapping to 14q24.2; Smoc1 (mouse) mapping to 12 D1.

## SOURCE

SMOC-1 (F-3) is a mouse monoclonal antibody raised against amino acids 285-330 mapping within an internal region of SMOC-1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

SMOC-1 (F-3) is recommended for detection of SMOC-1 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 SMOC-1 siRNA (h): sc-63044, SMOC-1 siRNA (m): sc-63045, SMOC-1 shRNA Plasmid (h): sc-63044-SH, SMOC-1 shRNA Plasmid (m): sc-63045-SH, SMOC-1 shRNA (h) Lentiviral Particles: sc-63044-V and SMOC-1 shRNA (m) Lentiviral Particles: sc-63045-V.

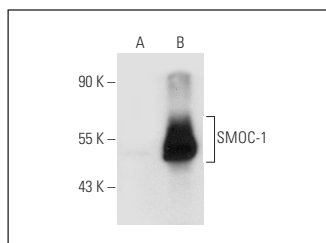
Molecular Weight of SMOC-1: 54 kDa.

Positive Controls: SMOC-1 (h): 293 Lysate: sc-110902, rat ovary extract: sc-2399 or A-431 whole cell lysate: sc-2201.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



SMOC-1 (F-3): sc-133150. Western blot analysis of SMOC-1 expression in non-transfected: sc-110760 (A) and human SMOC-1 transfected: sc-110902 (B) 293 whole cell lysates.

## 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](http://www.scbt.com) for detailed protocols and support products.