

SMOC-1 (E-15): sc-55288

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 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SMOC-1 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-55288 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SMOC-1 (E-15) is recommended for detection of SMOC-1 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) 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 and SMOC-1 siRNA (m): sc-63045.

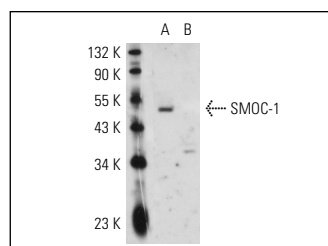
Molecular Weight of SMOC-1: 48 kDa.

Positive Controls: mouse ovary extract: sc-2404 or rat ovary extract: sc-2399.

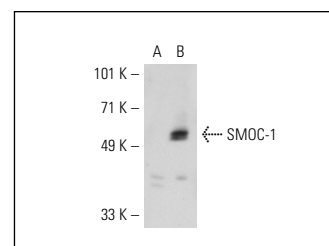
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotting 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SMOC-1 (E-15): sc-55288. Western blot analysis of SMOC-1 expression in human SMOC-1 transfected: sc-110902 (A) and non-transfected: sc-110760 (B) 293 whole cell lysates.



SMOC-1 (E-15): sc-55288. 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.

RESEARCH USE

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

PROTOCOLS

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