

OS-9 (G-15): sc-168854

BACKGROUND

OS-9 is a 667 amino acid endoplasmic reticulum protein that contains one PRKCSH domain and is expressed as three isoforms, designated OS-9-1, OS-9-2 and OS-9-3. Expressed ubiquitously in normal tissue and at high levels in osteosarcomas, OS-9 functions to bind HIF-1 α (hypoxia-inducible factor 1, α), a protein that plays an important role in angiogenesis (the development of blood vessels) and in the hypoxic response. Through its interaction with HIF-1 α , OS-9 promotes the oxygen-dependent degradation of HIF-1 α , thereby affecting the HIF-1 α -mediated regulation of blood vessel growth and contributing to tumorigenesis. Additionally, OS-9 is thought to play a role in the ER-associated degradation (ERAD) of misfolded glycoproteins, assisting in the transport and polyubiquitination of damaged peptides.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: OS9 (human) mapping to 12q13.3; Os9 (mouse) mapping to 10 D3.

SOURCE

OS-9 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of OS-9 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-168854 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OS-9 (G-15) is recommended for detection of OS-9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

OS-9 (G-15) is also recommended for detection of OS-9 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for OS-9 siRNA (h): sc-96230, OS-9 siRNA (m): sc-151325, OS-9 shRNA Plasmid (h): sc-96230-SH, OS-9 shRNA Plasmid (m): sc-151325-SH, OS-9 shRNA (h) Lentiviral Particles: sc-96230-V and OS-9 shRNA (m) Lentiviral Particles: sc-151325-V.

Molecular Weight of OS-9: 88 kDa.

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 Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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.

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 or our catalog for detailed protocols and support products.