# SANTA CRUZ BIOTECHNOLOGY, INC.

# SCUBE3 (S-14): sc-103879



## BACKGROUND

SCUBE3 (signal peptide, CUB domain, EGF-like 3), also known as CEGF3, is a novel secreted 993 amino acid cell-surface osteoblast protein that plays an important role in bone cell biology. While highly expressed in osteoblasts, SCUBE3 expression is unobservable or very low in non-bone tissues. SCUBE3 forms homo-oligomers and hetero-oligomers with SCUBE1, and may undergo C-terminal proteolytic cleavage or become N-glycosylated following translation. Two SCUBE3 isoforms exist as a result of alternative splicing events. SCUBE3 contains one CUB domain and nine EGF-like domains, and is encoded by a gene which maps to human chromosome 6p21.31, a region associated with a rare form of metabolic bone disease known as Paget's disease. Chromosome 6 contains 170 million base pairs and comprises nearly 6% of the human genome.

## CHROMOSOMAL LOCATION

Genetic locus: SCUBE3 (human) mapping to 6p21.31; Scube3 (mouse) mapping to 17 A3.3.

## SOURCE

SCUBE3 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SCUBE3 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103879 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

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

## APPLICATIONS

SCUBE3 (S-14) is recommended for detection of SCUBE3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); non cross-reactive with SCUBE1 or SCUBE2.

SCUBE3 (S-14) is also recommended for detection of SCUBE3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SCUBE3 siRNA (h): sc-95189, SCUBE3 siRNA (m): sc-106536, SCUBE3 shRNA Plasmid (h): sc-95189-SH, SCUBE3 shRNA Plasmid (m): sc-106536-SH, SCUBE3 shRNA (h) Lentiviral Particles: sc-95189-V and SCUBE3 shRNA (m) Lentiviral Particles: sc-106536-V.

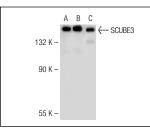
Molecular Weight of SCUBE3: 130/65 kDa.

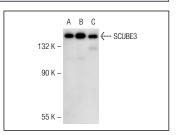
Positive Controls: SCUBE3 (h): 293T Lysate: sc-177903 or HUV-EC-C cell lysate: sc-364180.

#### **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) 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





SCUBE3 (S-14): sc-103879. Western blot analysis of SCUBE3 expression in non-transfected 293T: sc-117752 (**A**), human SCUBE3 transfected 293T: sc-177903 (**B**) and HUV-EC-C (**C**) whole cell lysates SCUBE3 (S-14): sc-103879. Western blot analysis of SCUBE3 expression in non-transfected 2937: sc-117752 (**A**), human SCUBE3 transfected 2937: sc-177904 (**B**) and HUV-EC-C (**C**) 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.

#### MONOS Satisfation Guaranteed

Try SCUBE3 (G-5): sc-514696 or SCUBE3 (H-10): sc-514697, our highly recommended monoclonal alternatives to SCUBE3 (S-14).