

SCUBE2 (D-14): sc-109427

BACKGROUND

SCUBE2 (signal peptide, CUB domain, EGF-like 2), also known as CEGP1, Cegp1 or Cegf1, is a 999 amino acid protein that is ubiquitously expressed in adult tissues and belongs to the evolutionarily conserved SCUBE protein family. Containing a CUB domain and nine EGF-like domains, SCUBE2 manifests as a secreted surface-anchored glycoprotein when overexpressed and is considered a novel component of the HH (Hedgehog) signal. The HH signal plays a pivotal role in induction of ventral neuronal and muscle cell types around the midline during vertebrate development. It is suggested that SCUBE2 expression is important in breast cancer progression and may serve as a useful prognostic marker. SCUBE2 forms homo-oligomers and hetero-oligomers with SCUBE1 and SCUBE3. Expressed as three isoforms produced by alternative splicing events, SCUBE2 is encoded by a gene located on human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome.

REFERENCES

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- Kawakami, A., et al. 2005. The zebrafish-secreted matrix protein you/SCUBE2 is implicated in long-range regulation of Hedgehog signaling. *Curr. Biol.* 15: 480-488.
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CHROMOSOMAL LOCATION

Genetic locus: SCUBE2 (human) mapping to 11p15.4.

SOURCE

SCUBE2 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SCUBE2 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.

Blocking peptide available for competition studies, sc-109427 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SCUBE2 (D-14) is recommended for detection of SCUBE2 of 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 SCUBE2 siRNA (h): sc-96423, SCUBE2 shRNA Plasmid (h): sc-96423-SH and SCUBE2 shRNA (h) Lentiviral Particles: sc-96423-V.

Molecular Weight of SCUBE2: 110 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) 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.

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.


 MONOS
Satisfation
Guaranteed

Try **SCUBE2 (G-4): sc-398607**, our highly recommended monoclonal alternative to SCUBE2 (D-14).