

# SES3 (2C9): sc-517092

## BACKGROUND

The sestrin family consists of a group of conserved proteins that are suggested to be involved in the regulation of cell growth and survival and may play a role in mediating stress-induced cellular responses. Upregulated following oxidative stress or DNA damage, sestrin proteins are also thought to potentiate adenosine monophosphate-activated protein kinase (AMPK) and inhibit activation of target of rapamycin (TOR). SESN3 (sestrin 3), also known as SEST3, is a 492 amino acid, widely expressed protein belonging to the sestrin family. Exists as 3 alternatively spliced isoforms, SESN3 is encoded by a gene located on human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SESN3 (human) mapping to 11q21.

## SOURCE

SESN3 (2C9) is a mouse monoclonal antibody raised against amino acids 212-321 representing partial length SESN3 of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

SESN3 (2C9) is recommended for detection of SESN3 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SESN3 siRNA (h): sc-106545, SESN3 shRNA Plasmid (h): sc-106545-SH and SESN3 shRNA (h) Lentiviral Particles: sc-106545-V.

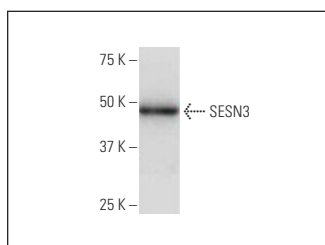
Molecular Weight of SESN3: 57 kDa.

Positive Controls: human pancreas extract: sc-363770.

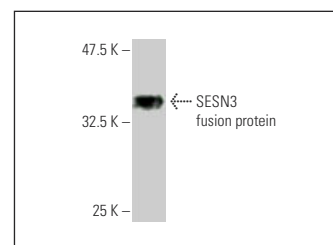
## RECOMMENDED SUPPORT REAGENTS

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, 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).

## DATA



SESN3 (2C9): sc-517092. Western blot analysis of SESN3 expression in human pancreas tissue extract.



SESN3 (2C9): sc-517092. Western blot analysis of human recombinant SESN3 fusion protein.

## 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.