SANTA CRUZ BIOTECHNOLOGY, INC.

DAF-12 (ce-267): sc-50481

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Several proteins involved in regulating the aging process in *C. elegans* have been identified. DAF-2, DAF-12, DAF-16 and AGE-1 (also known as DAF-23) regulate lifespan via an insulin-signaling pathway. Specifically, decreases in DAF-2 signaling induce metabolic and developmental changes, as in mammalian metabolic control by the insulin receptor. DAF-12 regulates the developmental stage transitions of larval diapause, developmental age and adult longevity. DAF-16 encodes a member of the hepatocyte nuclear factor 3 (HNF-3)/forkhead family of transcriptional regulators. AGE-1 is a homolog of mammalian phosphatidylinositol-3-OH kinase (PI(3)K) catalytic subunits and is required for non-dauer development and normal senescence. CLK-1, a homolog of the yeast COQ7/CAT5 protein, is thought to exert its effects on longevity via the synthesis of ubiquinone, an essential component of electron transport. Mortal germline (MRT) checkpoint protein MRT-2 is required for germline immortality and telomere replication.

REFERENCES

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SOURCE

DAF-12 (ce-267) is a rabbit polyclonal antibody raised against amino acids 1-267 representing full length DAF-12 of *C. elegans* origin.

PRODUCT

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

APPLICATIONS

DAF-12 (ce-267) is recommended for detection of DAF-12 of *Caenorhabditis elegans* 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).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.