SANTA CRUZ BIOTECHNOLOGY, INC.

CCM3 (H-189): sc-135268



BACKGROUND

Programmed cell death (apoptosis) of nonessential cells is necessary for embryogenesis, metamorphosis, tissue turnover and proper development and function of the immune system. CCM3, also known as PDCD10, is a member of the family of programmed cell death proteins that regulate apoptotic pathways. CCM3 is an anti-apoptotic protein that is essential for proper vascular development and maturation. Through direct interaction with and positive regulation of MST-4 in the ERK pathway, CCM3 promotes proper cell growth and differentiation. Defects in the gene encoding CCM3 may be related to cerebral cavernous malformations 3 (CCM3), a disease characterized by vascular anomalies found in the central nervous system that can cause stroke, seizures and focal hemorrhages.

REFERENCES

- Bergametti, F., et al. 2004. Mutations within the programmed cell death 10 gene cause cerebral cavernous malformations. Am. J. Hum. Genet. 76: 42-51.
- Guclu, B., et al. 2005. Mutations in apoptosis-related gene, PDCD10, cause cerebral cavernous malformation 3. Neurosurgery 57: 1008-1013.

CHROMOSOMAL LOCATION

Genetic locus: PDCD10 (human) mapping to 3q26.1; Pdcd10 (mouse) mapping to 3 E3.

SOURCE

CCM3 (H-189) is a rabbit polyclonal antibody raised against amino acids 3-191 mapping within an internal region of CCM3 of human origin.

PRODUCT

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

APPLICATIONS

CCM3 (H-189) is recommended for detection of CCM3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

CCM3 (H-189) is also recommended for detection of CCM3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CCM3 siRNA (h): sc-62084, CCM3 siRNA (m): sc-62085, CCM3 shRNA Plasmid (h): sc-62084-SH, CCM3 shRNA Plasmid (m): sc-62085-SH, CCM3 shRNA (h) Lentiviral Particles: sc-62084-V and CCM3 shRNA (m) Lentiviral Particles: sc-62085-V.

Molecular Weight of CCM3: 25 kDa.

Positive Controls: HCT-116 whole cell lysate: sc-364175, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

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.

DATA





CCM3 (H-189): sc-135268. Western blot analysis of CCM3 expression in HeLa (**A**), Jurkat (**B**), K-562 (**C**), MCF7 (**D**) and CCRF-CEM (**E**) whole cell lysates. CCM3 (H-189): sc-135268. Western blot analysis of CCM3 expression in HCT 116 whole cell lysate.

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 CCM3 (C-8): sc-365586 or CCM3 (F-12):

sc-365587, our highly recommended monoclonal alternatives to CCM3 (H-189).