SANTA CRUZ BIOTECHNOLOGY, INC.

MVK (A-20): sc-27585

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Mevalonate kinase (MVK) is an early enzyme in isoprenoid and sterol synthesis. Mevalonate kinase catalyzes the ATP-dependent phosphorylation of mevalonic acid to form mevalonate 5-phosphate. Mevalonate is a key intermediate, and mevalonate kinase a key early enzyme, in isoprenoid and sterol synthesis. Deficiency in MVK activity contributes to mevalonic aciduria and hyperimmunoglobulinemia D/periodic fever syndrome (HIDS). Mevalonic acid accumulates because of failure of conversion to 5-phosphomevalonic acid, which is catalyzed by mevalonate kinase. Mevalonic acid is synthesized from 3-hydroxy-3-methylglutaryl-CoA, a reaction catalyzed by HMG-CoA reductase.

CHROMOSOMAL LOCATION

Genetic locus: MVK (human) mapping to 12q24.11; Mvk (mouse) mapping to 5 F.

SOURCE

MVK (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MVK 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-27585 P, (100 µg 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

MVK (A-20) is recommended for detection of MVK of mouse, rat and 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).

MVK (A-20) is also recommended for detection of MVK in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MVK siRNA (h): sc-106266, MVK siRNA (m): sc-149725, MVK shRNA Plasmid (h): sc-106266-SH, MVK shRNA Plasmid (m): sc-149725-SH, MVK shRNA (h) Lentiviral Particles: sc-106266-V and MVK shRNA (m) Lentiviral Particles: sc-149725-V.

Molecular Weight (predicted) of MVK: 42 kDa.

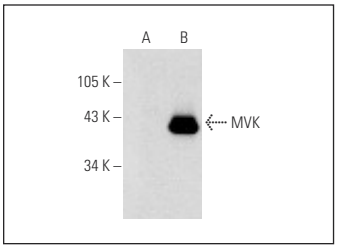
Molecular Weight (observed) of MVK: 43/46 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, MVK (h): 293T Lysate: sc-112229 or WEHI-231 whole cell lysate: sc-2213.

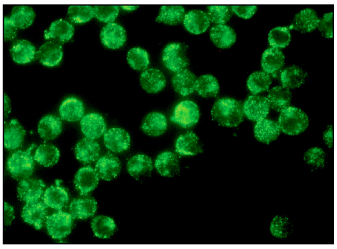
RECOMMENDED SECONDARY REAGENTS

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



MVK (A-20): sc-27585. Western blot analysis of MVK expression in non-transfected: sc-117752 (**A**) and human MVK transfected: sc-112229 (**B**) 293T whole cell lysates.



MVK (A-20): sc-27585. Immunofluorescence staining of methanol-fixed WEHI-231 cells showing cytoplasmic localization.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **MVK (D-3): sc-390669**, our highly recommended monoclonal alternative to MVK (A-20).