

MVK (N-20): sc-27587

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.

REFERENCES

- Zheng, Q. 1994. On the exact hazard and survival functions of the MVK stochastic carcinogenesis model. *Risk Anal.* 14: 1081-1084.
- Zheng, Q. 1995. On the MVK stochastic carcinogenesis model with Erlang distributed cell life lengths. *Risk Anal.* 15: 495-502.

CHROMOSOMAL LOCATION

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

SOURCE

MVK (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus 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-27587 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MVK (N-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 (N-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.

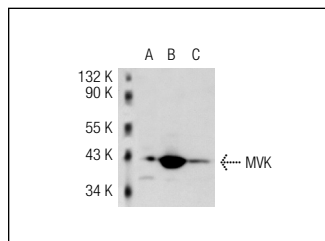
Molecular Weight (observed) of MVK: 43/46 kDa.

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 (N-20): sc-27587. Western blot analysis of MVK expression in non-transfected 293T: sc-117752 (A), human MVK transfected 293T: sc-112229 (B) and Jurkat (C) whole cell lysates.

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
Satisfaction
Guaranteed

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