**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 MKV activity contributes to mevalonic aciduria and hyperimmunoglobulinemia D/pericarditis 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**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

MVK (H-300) is a rabbit polyclonal antibody raised against amino acids 97-396 mapping at the C-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.

**RESEARCH USE**

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

**APPLICATIONS**

MVK (H-300) 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 (H-300) is also recommended for detection of MVK in additional species, including equine, bovine, porcine and canine.

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: A-431 whole cell lysate: sc-2201 or human liver extract: sc-363766.

**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-2780 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2820 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**PROTOCOLS**

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