

PMVK (K-17): sc-79691

BACKGROUND

PMVK (phosphomevalonate kinase), also known as PMK, PMKA, PMKASE or HUMPMK, is a 192 amino acid peroxisomal enzyme belonging to the nucleoside monophosphate (NMP) kinase family and is expressed in heart, liver, skeletal muscle, kidney and pancreas with lower expression in brain, placenta and lung. Induced by sterol, PMVK participates in isopentenyl diphosphate biosynthesis via the mevalonate pathway. PMVK catalyzes the conversion of mevalonate 5-phosphate into mevalonate 5-diphosphate in the fifth reaction of the cholesterol biosynthetic pathway. PMVK exists as a monomer and is encoded by a gene located on human chromosome 1, which houses over 3,000 genes and is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PMVK (human) mapping to 1q21.3; Pmvk (mouse) mapping to 3 F1.

RESEARCH USE

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

SOURCE

PMVK (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PMVK 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-79691 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PMVK (K-17) is recommended for detection of PMVK of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

PMVK (K-17) is also recommended for detection of PMVK in additional species, including equine and porcine.

Suitable for use as control antibody for PMVK siRNA (h): sc-76180, PMVK siRNA (m): sc-76181, PMVK shRNA Plasmid (h): sc-76180-SH, PMVK shRNA Plasmid (m): sc-76181-SH, PMVK shRNA (h) Lentiviral Particles: sc-76180-V and PMVK shRNA (m) Lentiviral Particles: sc-76181-V.

Molecular Weight of PMVK: 22 kDa.

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) 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.

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.