

MVD (E-20): sc-160550

BACKGROUND

MVD (mevalonate [diphospho] decarboxylase), also known as MPD (mevalonate pyrophosphate decarboxylase), is a 400 amino acid protein that belongs to the diphosphomevalonate decarboxylase family. Expressed in lung, liver, heart, skeletal muscle, brain, pancreas, placenta and kidney, MVD enzymatically catalyzes the first step in isoprene biosynthesis, namely the ATP-dependent conversion of mevalonate pyrophosphate into isopentenyl pyrophosphate, a cholesterol precursor. MVD exists as a homodimer that simultaneously dehydrates and decarboxylates its substrate while hydrolyzing ATP. As MVD is a crucial enzyme in early cholesterol synthesis, it may be a useful target for drugs that aim to lower serum cholesterol levels.

CHROMOSOMAL LOCATION

Genetic locus: MVD (human) mapping to 16q24.3; Mvd (mouse) mapping to 8 E1.

SOURCE

MVD (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MVD 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-160550 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

MVD (E-20) is recommended for detection of MVD 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).

MVD (E-20) is also recommended for detection of MVD in additional species, including canine.

Suitable for use as control antibody for MVD siRNA (h): sc-93276, MVD siRNA (m): sc-149724, MVD shRNA Plasmid (h): sc-93276-SH, MVD shRNA Plasmid (m): sc-149724-SH, MVD shRNA (h) Lentiviral Particles: sc-93276-V and MVD shRNA (m) Lentiviral Particles: sc-149724-V.

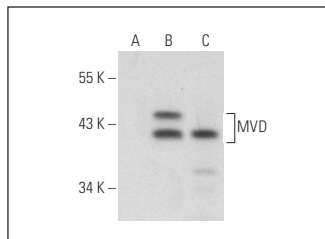
Molecular Weight of MVD: 43 kDa.

Positive Controls: MVD (h): 293T Lysate: sc-159765, K-562 whole cell lysate: sc-2203 or A-431 whole cell lysate: sc-2201.

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



MVD (E-20): sc-160550. Western blot analysis of MVD expression in non-transfected 293T: sc-117752 (A), human MVD transfected 293T: sc-159765 (B) and K-562 (C) whole cell lysates.

PROTOCOLS

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


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Try **MVD (H-11): sc-376975** or **MVD (2B5): sc-100559**, our highly recommended monoclonal alternatives to MVD (E-20).