## BACKGROUND

MAVS (mitochondrial antiviral signaling protein), also known as IPS1, KIAA1271, VISA or CARDIF, is a 540 amino acid protein that contains one CARD domain and several transmembrane domains, and localizes to the outer mitochondrial membrane. Expressed throughout the body with highest expression in liver, heart, placenta, skeletal muscle and peripheral blood leukocytes, MAVS functions downstream of proteins such as RIG-I, that detect double-stranded (ds) viral replication, and is required for proper immune response against ds viral infection. MAVS is thought to activate pathways that lead to the induction of antiviral cytokines and may protect the cells from viral-induced apoptosis. MAVS function can be inactivated via cleavage by a protease complex that degrades the CARD and transmembrane domains, thereby preventing MAVS from interacting with other proteins. Three isoforms of MAVS are expressed due to alternative splicing events.

## CHROMOSOMAL LOCATION

Genetic locus: MAVS (human) mapping to 20p13.

## SOURCE

MAVS (H-135) is a rabbit polyclonal antibody raised against amino acids 1-135 mapping within an N-terminal cytoplasmic domain of MAVS of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

MAVS ( $\mathrm{H}-135$ ) is recommended for detection of MAVS of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 $\mu \mathrm{g}$ per 100-500 $\mu \mathrm{g}$ of total protein ( 1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:501:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).
Suitable for use as control antibody for MAVS siRNA (h): sc-75755, MAVS shRNA Plasmid (h): sc-75755-SH and MAVS shRNA (h) Lentiviral Particles: sc-75755-V.
Molecular Weight of cleaved MAVS: 51-54 kDa.
Molecular Weight of endogenous MAVS: 57 kDa .
Molecular Weight of aggregated MAVS: 75 kDa .
Positive Controls: MCF7 whole cell lysate: sc-2206, CCD-1064Sk cell lysate: sc-2263 or HeLa whole cell lysate: sc-2200.

## 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 ${ }^{\top \mathrm{M}}$ compatible goat antirabbit 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-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz ${ }^{\text {™ }}$ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



MAVS (H-135): sc-68926. Western blot analysis of MAVS expression in HeLa (A), CCD-1064Sk (B) and MCF7 (C) whole cell lysates.


MAVS (H-135): sc-68926. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing basal membrane staining of hepatocytes and cytoplasmic staining of Bile duct cells.

## 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

Satisfation Guaranteed

Try MAVS (E-3): sc-166583, our highly recommended monoclonal alternative to MAVS (H-135). Also, for AC, HRP, FITC, PE, Alexa Fluor ${ }^{\circledR} 488$ and Alexa Fluor ${ }^{\circledR} 647$ conjugates, see MAVS (E-3): sc-166583.

