

Store at -20°C  
#3993

# MAVS Antibody

✓ 100 µl  
(10 western blots)

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rev. 05/28/10

This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #57506  
Swiss-Prot Acc. #Q7Z434

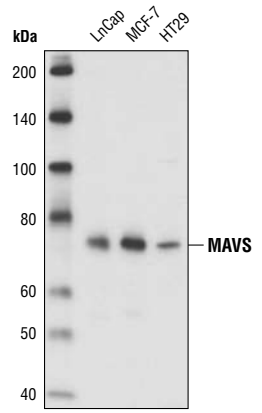
Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IF-IC Endogenous	H	75, 52 kDa	Rabbit**

**Background:** The mitochondrial antiviral signaling protein (MAVS, VISA) contributes to innate immunity by triggering IRF-3 and NF-κB activation in response to viral infection, leading to the production of IFN-β (1). The MAVS protein contains an N-terminal CARD domain and a C-terminal mitochondrial transmembrane domain. The MAVS adaptor protein plays a critical and specific role in viral defenses (2). MAVS acts downstream of the RIG-I RNA helicase and viral RNA sensor, leading to the recruitment of IKKe, TRIF and TRAF6 (3,4). Some viruses have evolved strategies to circumvent these innate defenses by using proteases that cleave MAVS to prevent its mitochondrial localization (5,6).

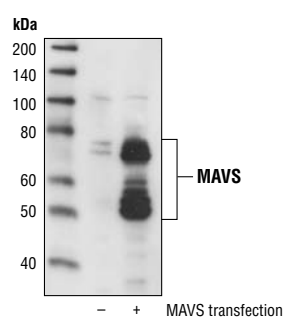
**Specificity/Sensitivity:** MAVS Antibody detects endogenous levels of total human MAVS protein. The bands detected at 52 and 75 kDa correlate with those described by Seth et al. (2005).

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues at the carboxyl terminus of human MAVS. Antibodies were purified by affinity chromatography.

- Background References:**
- (1) Seth, R.B. et al. (2005) *Cell* 122, 669–682.
  - (2) Sun, Q. et al. (2006) *Immunity* 24, 633–642.
  - (3) Xu, L.G. et al. (2005) *Mol. Cell* 19, 727–740.
  - (4) Yoneyama, M. et al. (2004) *Nat. Immunol.* 5, 730–737.
  - (5) Lin, R. et al. (2006) *J. Virol.* 80, 6072–6083.
  - (6) Chen, Z. et al. (2007) *J. Virol.* 81, 964–976.



Western blot analysis of extracts from LNCaP, MCF-7, and HT29 cell lines using MAVS Antibody.



Western blot analysis of extracts from HeLa cells, mock-transfected or transfected with human MAVS, using MAVS Antibody.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

Western blotting	1:1000
Immunofluorescence (IF-IC)	1:50

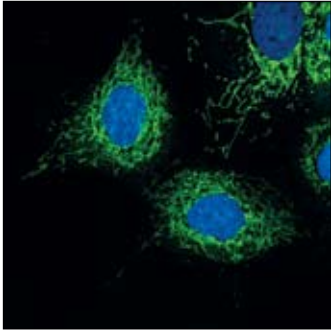
For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

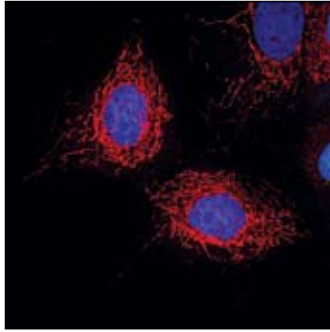
**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

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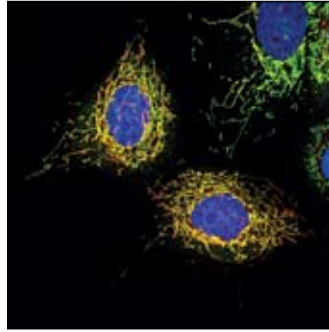
**MAVS**



**Mitochondria**



**Merge**



*Confocal immunofluorescent analysis of MCF-7 cells using MAVS Antibody (green) showing colocalization with mitochondria that have been labeled with MitoTracker® Red CMXRos (red). Blue pseudocolor = DRAQ5® 4084 (fluorescent DNA dye).*