

## **MVP Antibody (C-term)**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6216A

# **Specification**

## MVP Antibody (C-term) - Product Information

**Application** WB, IHC-P, FC,E **Primary Accession** 014764 Other Accession NP 005106 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 99327 Antigen Region 863-893

### MVP Antibody (C-term) - Additional Information

#### **Gene ID 9961**

#### **Other Names**

Major vault protein, MVP, Lung resistance-related protein, MVP, LRP

#### Target/Specificity

This MVP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 863-893 amino acids from the C-terminal region of human MVP.

# **Dilution**

WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

# Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

MVP Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# MVP Antibody (C-term) - Protein Information

#### Name MVP



## **Synonyms LRP**

**Function** Required for normal vault structure. Vaults are multi-subunit structures that may act as scaffolds for proteins involved in signal transduction. Vaults may also play a role in nucleo-cytoplasmic transport. Down-regulates IFNG-mediated STAT1 signaling and subsequent activation of JAK. Down-regulates SRC activity and signaling through MAP kinases.

#### **Cellular Location**

Cytoplasm. Nucleus, nuclear pore complex. Cytoplasm, perinuclear region. Note=5% found in the nuclear pore complex (PubMed:15133037). Translocates from the nucleus to the cytoplasm upon EGF treatment (PubMed:16441665)

#### **Tissue Location**

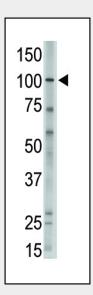
Present in most normal tissues. Higher expression observed in epithelial cells with secretory and excretory functions, as well as in cells chronically exposed to xenobiotics, such as bronchial cells and cells lining the intestine. Overexpressed in many multidrug- resistant cancer cells

### MVP Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

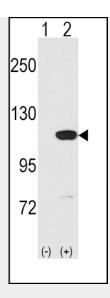
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## MVP Antibody (C-term) - Images

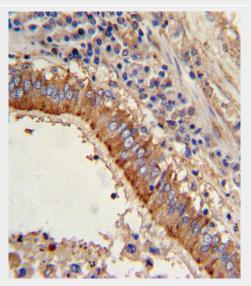


The anti-MVP C-term Antibody (Cat.#AP6216a) is used in Western blot to detect MVP in A375 lysate.



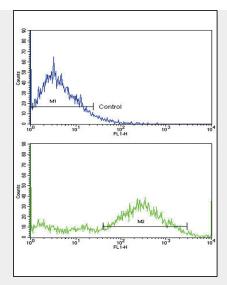


Western blot analysis of MVP (arrow) using rabbit polyclonal MVP C-term Antibody (Cat.#AP6216a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MVP gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human lung carcinoma with MVP Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Flow cytometric analysis of NCI-H292 cells using MVP Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# MVP Antibody (C-term) - Background

MVP, the major vault protein, is a lung resistance-related protein. Vaults are multi-subunit structures that may be involved in nucleo-cytoplasmic transport. This protein mediates drug resistance, perhaps via a transport process. It is widely distributed in normal tissues, and overexpressed in multidrug-resistant cancer cells. The protein overexpression is a potentially useful marker of clinical drug resistance.

# **MVP Antibody (C-term) - References**

Aronica, E., et al., Epilepsia 44(9):1166-1175 (2003). Klunder, J.W., et al., Hum. Pathol. 34(2):150-155 (2003). Burger, H., et al., Clin. Cancer Res. 9(2):827-836 (2003). Yu, Z., et al., J. Biol. Chem. 277(43):40247-40252 (2002). van den Heuvel-Eibrink, M.M., et al., Leukemia 16(5):833-839 (2002).