

MVP Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6216A

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q14764
Other Accession	NP_005106
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB02061
Calculated MW	99327
Antigen Region	863-893

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~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
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.

Protein Information

Name	MVP
Synonyms	LRP
Function	Structural component of the vault particle, which is a massive

ribonucleoprotein complex that may play a role in cargo transport and signal transduction (PubMed:[40691181](#)). Oligomerizes to form a cage-like vault complex, which can house several minor vault components including PARP4 (PubMed:[40691181](#)). Vaults may play a role in nucleo-cytoplasmic transport (PubMed:[15133037](#)). Down-regulates IFNG- mediated STAT1 signaling and subsequent activation of JAK (PubMed:[16418217](#)). Down-regulates SRC activity and signaling through MAP kinases (PubMed:[16441665](#)).

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

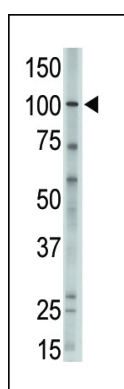
Background

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.

References

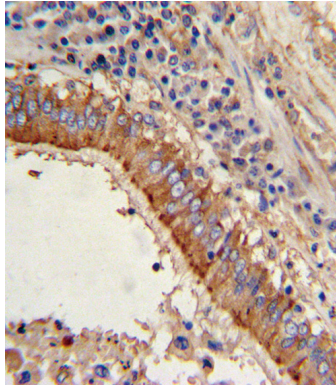
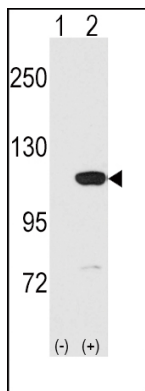
Aronica, E., et al., *Epilepsia* 44(9):1166-1175 (2003).
Klunder, J.W., et al., *Hum. Pathol.* 34(2):150-155 (2003).
Burger, H., et al., *Clin. Cancer Res.* 9(2):827-836 (2003).
Yu, Z., et al., *J. Biol. Chem.* 277(43):40247-40252 (2002).
van den Heuvel-Eibrink, M.M., et al., *Leukemia* 16(5):833-839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

Images

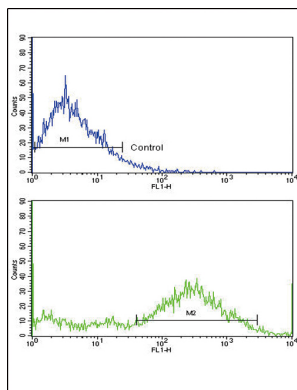


The anti-MVP C-term Antibody (Cat.#AP6216a) is used in Western blot to detect MVP in A375 lysate.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.