10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Major Vault Protein (MVP) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM280]
Catalog # AH12837

Specification

Major Vault Protein (MVP) Antibody - With BSA and Azide - Product Information

Application	**,2,3,4,**
Primary Accession	Q14764
Other Accession	9961, 632177
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG1, kappa**
Calculated MW	**104-110kDa KDa**

Major Vault Protein (MVP) Antibody - With BSA and Azide - Additional Information

Gene ID 9961

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

Storage
Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions
Major Vault Protein (MVP) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Major Vault Protein (MVP) Antibody - With BSA and Azide - 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

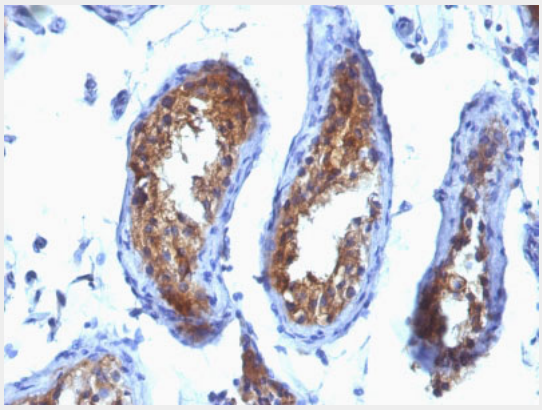
excretory functions, as well as in cells chronically exposed to xenobiotics, such as bronchial cells and cells lining the intestine. Overexpressed in many multidrug- resistant cancer cells

Major Vault Protein (MVP) Antibody - With BSA and Azide - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Major Vault Protein (MVP) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with MVP Monoclonal Antibody (SPM280).

Major Vault Protein (MVP) Antibody - With BSA and Azide - Background

Recognizes a protein of 104kDa-110kDa, characterized as major vault protein (MVP). Vaults are large ribonucleoprotein particles (RNPs) present in all eukaryotic cells. They have a complex morphology, including several small molecules of RNA, but a single protein species. The MVP accounts for >70% of their mass. Their shape is reminiscent of the nucleopore central plug. Treatment of cells with estradiol increases the amount of MVP in nuclear extract. The hormone-dependent interaction of vaults with ER is prevented in vitro by sodium molybdate. Antibodies to estrogen, progesterone and glucocorticoid receptors are able to co-immunoprecipitate the MVP. MVP is overexpressed in many neoplastic tissues and cell lines. Expression of MVP predicts a poor response to chemotherapy.

Major Vault Protein (MVP) Antibody - With BSA and Azide - References

Abbondanza C, Rossi V, Roscigno A, Gallo L, Belsito A, Piluso G, Medici N, Nigro V, Molinari AM, Moncharmont B, Puca GA: Interaction of vault particles with estrogen receptor in the MCF-7 breast cancer cell. J Cell Biol 1998;141(6):1301-1310. | Den Boer, M.L. et al. Relationship between major vault protein/lung resistance protein, multidrug resistance-associated protein, P-glycoprotein expression, and drug resistance in childhood leukemia. Blood 91, 2092-2098 (1998). |