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

MVP Antibody (N-term) (Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2146a

Product Information

Application	WB, E
Primary Accession	Q14764
Other Accession	Q62667, Q9EQK5, Q3SYU9, NP_005106.2
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	599CT2.4.1
Calculated MW	99327
Antigen Region	12-39

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 mice immunized with a KLH conjugated synthetic peptide between 12-39 amino acids from the N-terminal region of human MVP.
Dilution	WB~~1:100~1600 E~~Use at an assay dependent concentration.
Format	Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.
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 (N-term) (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

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

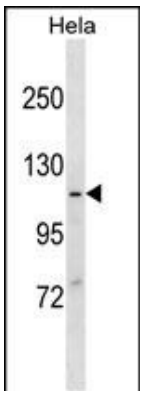
Background

This gene encodes the major vault protein which 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. This gene produces two transcripts by using two alternative exon 2 sequences; however, the open reading frames are the same in both transcripts.

References

Li, J., et al. Lung Cancer 69(1):116-122(2010)
Liang, P., et al. Biochem. Cell Biol. 88(3):445-450(2010)
An, H.J., et al. Cell Biochem. Funct. 27(5):289-295(2009)
Li, L., et al. Zhonghua Zhong Liu Za Zhi 31(3):199-202(2009)
Lara, P.C., et al. Radiat Oncol 4, 29 (2009) :

Images



MVP Antibody (N-term)(Ascites)(Cat. #AM2146a) western blot analysis in Hela cell line lysates (35µg/lane).This demonstrates the MVP antibody detected the MVP protein (arrow).