

Product datasheet for **AM32033PU-N**

MVP Mouse Monoclonal Antibody [Clone ID: 1014]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1014
Applications:	IHC, WB
Recommended Dilution:	Suitable for Western blotting and Immunohistochemistry on Frozen Sections . The mAb 1014 can be applied for the detection of MVP/LRP in a large number of eukaryotic cells including the MCF-7 and Hela tumor cell lines. The mAb is especially applicable to study the association of Estrogen Receptor with vaults and the study of the mechanism of action of Estrogenic hormones.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	A BALB/c mouse was immunized with 5 µg of affinity purified nuclear extract proteins. Spleen cells were fused with equal number of Sp0Ag-14 myeloma cells.
Specificity:	This Monoclonal antibody <i>clone 1014</i> is specific for a 104-kD protein. This mAb is one of four mAb which recognize different epitopes of the protein. Cells whose supernatant showed a positive signal for a 104-kD band were selected and cloned by limited dilution.
Formulation:	PBS State: Purified State: Liquid purified Ig fraction Preservative: 0.05% Sodium Azide
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	major vault protein



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Database Link: [Entrez Gene 9961 Human Q14764](#)

Background: MVP is identical to lung-resistance related protein (LRP). 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. Amino acid 241-280 of human estrogen receptor (ER), (site of nuclear localization signal sequence), is mapped to be the site of interaction between ER and MVP. Treatment of cells with estradiol increases the amount of MVP in nuclear extract. Anti-estrogen 1C1182 shows no effect. The hormone-dependent interaction of vaults with ER is prevented in vitro by sodium molybdate. Antibodies to progesterone and glucocorticoid receptors are also able to co-immunoprecipitate the MVP. LRP is a protein overexpressed in many neoplastic tissues and cell lines. Expression of LRP predicts a poor response to chemotherapy. This 104-kD protein is the major vault protein (MVP) also described as the lung resistance protein (LRP) and has shown to interact with the estrogen receptor. The protein is part of a very large vault ribonucleoprotein complex present in all eukaryotic cells and its structure and protein composition is highly conserved. Because of the size, shape, and protein and RNA composition of this complex the particles are different from other ribonucleoproteins.

Synonyms: MVP, LRP