

## Product datasheet for **AM32049SU-N**

### **MVP Rat Monoclonal Antibody [Clone ID: LMR5]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	LMR5
Applications:	IHC
Recommended Dilution:	<b>Flow Cytometry</b> (Cell permeabilization required). <b>Immunohistochemistry on Frozen Sections, Air-Dried or Acetone Fixed Cells:</b> 1/20. <b>Immunohistochemistry on Paraffin Embedded Sections.</b> This antibody <i>LMR5</i> has potential value for detection of LRP/MVP-associated non-Pgp MDR in Human tumor samples.
Reactivity:	Human
Host:	Rat
Isotype:	IgG
Clonality:	Monoclonal
Specificity:	This Monoclonal antibody <i>LMR5</i> reacts with an internal epitope of the LRP/Major Vault Protein (P110), which is strongly overexpressed in various Human non-P-glycoprotein MDR tumor cell lines.
Formulation:	State: Liquid Stabilizer: 1% BSA Preservative: 0.09% 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
Database Link:	<a href="#">Entrez Gene 9961 Human Q14764</a>



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## 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

## Note:

**Mab producing cells:** The hybridoma cell line was obtained by fusion of lymph node cells from an immunized mouse (Balb/c) with SP2/O mouse myeloma cells.

**Culture Medium:** RPMI-1640 (Gibco, Paisley, Scotland UK), supplemented with Nutridoma-SR (Boehringer, Indianapolis, USA). The medium does not contain serum nor added enzymes. The antibody solution has been filtered through a 0.22 micron filter.

**NOTE:** This monoclonal antibody has been produced in a clinical laboratory in which no animal viruses are being studied or cultured.