BACKGROUND
Tumor cells that are insensitive to anticancer drugs often have a multidrug-resistant (MDR) phenotype. Proteins associated with this phenomenon are transport-associated proteins such as P-glycoprotein, multidrug resistance protein 1, lung resistance-related protein (LRP) and breast cancer resistance protein (BCRP). The LRP protein, which is identified as the major vault protein (MVP), is overexpressed in various multidrug-resistant cancer cell lines and clinical samples. The promoter of LRP is TATA-less; contains an inverted CCAAT-box and a Sp1 site located near a p53 binding motif. LRP has two alternativesplice variants, which differfrom each other within the 5'-leader. The long-LRP isoform is ubiquitously expressed and represents an almost constant portion of the total LRP mRNA in many different normal tissues. LRP is the major component of the multimeric ribonucleoprotein complexes, with several copies of an untranslated RNA, which has been shown to transport along cytoskeletal-based cellular tracks. In conclusion, LRP protein mediates drug resistance, perhaps via a transport process.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: MVP (human) mapping to 16p11.2; Mvp (mouse) mapping to 7 F3.

SOURCE
LRP (1032) is a mouse monoclonal antibody raised against LRP purified from MCF7 cells of human origin.

PRODUCT
Each vial contains 200 µg IgG; kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE
For research use only, not for use in diagnostic procedures.

APPLICATIONS
LRP (1032) is recommended for detection of LRP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1,000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).


Molecular Weight of LRP: 110 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, T98G cell lysate: sc-2294 or LRP (h2): 293T Lysate: sc-170414.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:

DATA

SELECT PRODUCT CITATIONS

STORAGE
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.