

Datasheet



Mouse mAb to **Major vault protein (MVP)**
Clone **1014**
Isotype **IgG1-κ**

Source

A BALB/c mouse was immunized with affinity purified nuclear extract proteins.
Fusion partner: Sp2/0-Ag14.

Specifications

1014 Is specific for the major vault protein, a 104-kDa highly conserved protein interacting with estrogen receptor. It is one of a series of four mAbs which recognize different epitopes of the protein. Major vault proteins 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.

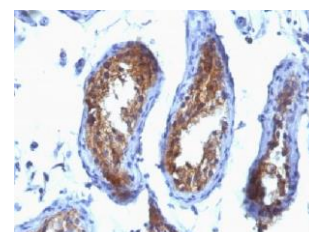


Figure 1: Human testicular cancer stained for MVP (frozen)

Species reactivity

Positive: human.

Applications

Demonstration of major vault protein and its interaction with estrogen receptor.

Frozen sections	Immunofluorescence	Immunoprecipitation	Paraffin sections	Western blot
+	+	+	+	+

Format

Produced in tissue culture, contains no host Ig. Antibodies are affinity purified and presented in PBS with 0,02 % sodium azide.

Stored at 4°C- 8°C, shelf life is at least 24 months after purchase.

Dilution advice

- Immunoblot (1-2 µg/ml).
- Immunofluorescence (0,5-1,0 µg/ml).
- Immunohistology (1-2 µg/ml for 30-60 minutes at RT; information on a suitable antigen retrieval method for staining of formalin-fixed tissues is unavailable to date).
- Immunoprecipitation (1-2 µg per 100-500 µg cell lysate protein/1 ml of anti-mouse coated Sepharose-4B suspension).

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Positive control

MCF-7 or HeLa cells. Breast cancer.

References

- Abbondanza, C. et al, *J. Cell Biol.* **141**, 1301-1310 (1998).
- Den Boer, M.L. et al. *Blood* **91**, 2092-2098 (1998).