

Datasheet for 100-401-P13**MMTV Antibody****Overview**

Description:	Anti-MMTV (RABBIT) Antibody - 100-401-P13
Item No.:	100-401-P13
Size:	100 µL
Applications:	WB
Reactivity:	Virus
Host Species:	Rabbit

Product Details

Background:	This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Enzyme, and Viral research. Mouse mammary tumor virus surface protein binds the virus to the receptor of the host cells triggering transmembrane protein refolding. This activates the fusion peptide and the structure coils and repeats positioning the fusion peptide near the C-terminus region. Inturn increasing close proximity and then fusion of viral and cell membranes. Anti-MMTV is ideal for researchers interested in Cancer, Viral, and Enzyme research.
Synonyms:	rabbit anti-MMTV Antibody, rabbit anti-mouse mammary tumor virus surface protein antibody, Envelope glycoprotein gp70, Surface protein, Glycoprotein 52, Transmembrane protein, Glycoprotein 36, Mouse mammary tumor virus (strain GR) (MMTV)
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	env
Reactivity:	Virus
Immunogen Type:	Native Protein
Immunogen:	MMTV was prepared from whole rabbit serum produced by repeated immunizations with a full length sequence for mouse mammary tumor virus surface protein tagged with His.

Purity/Specificity:	Mouse mammary tumor virus surface protein antibody was prepared from monospecific, delipidated and defibrinated antiserum, with addition of sodium azide to 0.01% and cross adsorbed with 6X HIS. A BLAST analysis was used to suggest cross-reactivity with MMTV from mouse based on a 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.
Relevant Links:	• 100-401-P13 SDS • UniProtKB - P03374 • NCBI - M15122

Application Details

Tested Applications:	WB
Application Note:	Anti-MMTV Antibody has been tested for use in western blotting. Specific conditions for reactivity should be optimized by the end user. Expect band approximately 41.2 kDa in size corresponding to MMTV surface protein by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:20,000
WB:	1:1000-1:2000

Formulation

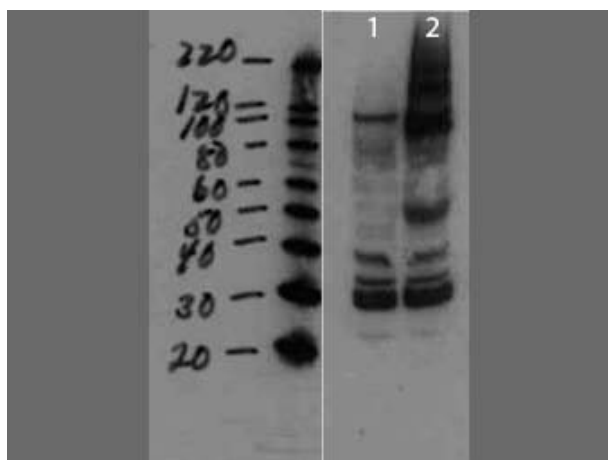
Physical State:	Liquid (sterile filtered)
Concentration:	76 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Rabbit anti-MMTV antibody. Lane 1: cell lysate negative control. Lane 2: cell lysate spiked with purified virus. Load: 10 µg per lane. Primary antibody: Mouse Mammary Tumor Virus Surface Protein antibody at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~41.2kDa for MMTV. Other bands: higher bands not unexpected since proteins are made from a larger precursor.

References

- Li M et al. HERV-K TM Subunit Elicits CD8+ T Cell Anergy and Tumor Immune Evasion via Targeting CD3 Coreceptor ϵ in AML and PDAC. *Adv Sci (Weinh)*. (2025)

Disclaimer

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