

Product datasheet for **TA396541S**

gag-pro-pol Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	WB: 1:1000-1:2000 ELISA: 1:10,000 - 1:20,000
Reactivity:	Virus
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	MMTV was prepared from whole rabbit serum produced by repeated immunizations with a full length sequence for mouse mammary tumor virus capsid protein tagged with His.
Specificity:	Mouse mammary tumor virus capsid 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.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	77mg/ml - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Stability:	Expiration date is one (1) year from date of receipt.
Database Link:	<u>P11283</u>



[View online »](#)

Background:

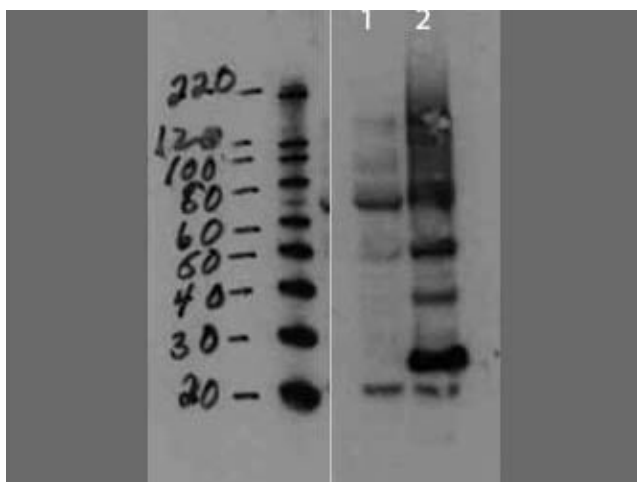
This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Enzyme, and Viral research. Mouse mammary tumor virus capsid is a polyprotein that is cleaved by aspartyl protease during or after the release of the virion from the plasma membrane. After entering the cell, reverse transcriptase converts the viral dimeric RNA genome into dsDNA in the cytoplasm. Displaying DNA polymerase activity and RNase H activity, this enzyme copies either DNA or RNA templates and cleaves the RNA strand of the RNA-DNA heteroduplex in a partially processive 3' to 5' endonucleasic mode. tRNA binds to the primer at the 5' end of the viral RNA. Reverse transcriptase uses the 3' end of the tRNA primer to perform a short round of RNA-dependent minus-strand DNA synthesis proceeding through the U5 region and ending after the repeated region. This RNA-DNA heteroduplex is digested by the RNase H and hybridizes with the identical R region at the 3' end of the viral RNA. RNase H then digests the RNA template except for a polypurine tract situated at the 5' end of the genome. RNase H probably can proceed both in a polymerase-dependent and a polymerase-independent mode. Reverse transcriptase also performs DNA-directed plus-strand DNA synthesis using the polypurine tract that has not been removed by RNase H as primers. Polypurine tract and tRNA primers are then removed by RNase H and the 3' and 5' ssDNA primer binding site regions hybridize to form a circular dsDNA intermediate. Strand displacement synthesis by reverse transcriptase to the primer binding site and polypurine tract ends produces a blunt ended, linear dsDNA copy of the viral genome that includes long terminal repeats at both ends. Anti-MMTV Antibody is ideal for researchers interested in Cancer, Enzyme, and Viral research.

Synonyms:

rabbit anti-MMTV antibody, rabbit anti-mouse mammary tumor virus capsid protein antibody, Gag-Pro-Pol, Mouse mammary tumor virus (strain C3H), MMTV capsid, Reverse transcriptase/ribonuclease H, Capsid protein p27

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 26.7 kDa in size corresponding to MMTV capsid protein by western blotting in the appropriate cell lysate or extract.

Product images:

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 Capsid 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: ~26.7kDa, ~28kDa and ~50kDa for MMTV. Other bands: higher bands are not unexpected since proteins are made from a larger precursor.