

## Datasheet for 600-401-992

**FIV matrix protein p15 Antibody****Overview**

<b>Description:</b>	Anti-Feline Immunodeficiency Virus Matrix Protein p15 (RABBIT) Antibody - 600-401-992
<b>Item No.:</b>	600-401-992
<b>Size:</b>	100 µg
<b>Applications:</b>	ELISA, WB
<b>Reactivity:</b>	Virus
<b>Host Species:</b>	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, Immunology and Nuclear Signaling research. Feline immunodeficiency virus (FIV) belongs to the lentivirus family. This family is characterized by assembly of the viral capsid at either the plasma membrane or at the limiting membrane of late endosomes. The capsid assembles from the viral Gag polyprotein. Upon release of a budding virion, Gag precursor protein is cleaved by the viral protease into its mature products, namely Matrix Protein, Capsid and Nucleocapsid. Matrix Protein, located at the N-terminus of the Gag polyprotein, is usually myristylated during protein translation, prior to the later events of virus assembly. The myristate moiety is believed to be sequestered within the Matrix Protein during protein translation and later facilitates membrane binding upon exposure resulting from conformational changes. Essential functions attributed to the Matrix Protein of lentiviruses include targeting newly synthesized Gag precursor proteins to the site of virus assembly by binding with cellular components such as phosphatidylinositides. In the mature virus particle, the Matrix Protein provides internal structure to the virion within the capsid, but is not exposed at the surface of the particle. Based on studies with HIV, it is postulated that FIV Matrix Protein may also serve additional functions, including nuclear localization of the viral core upon entry of the virus into a new host cell.

<b>Synonyms:</b>	rabbit anti-Feline immunodeficiency virus matrix protein p15 antibody, FIV Matrix Protein p15, Capsid protein p24, p1, Nucleocapsid protein p13, Gag polyprotein, Core polyprotein
<b>Host Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

## Target Details

<b>Gene Name:</b>	gag
<b>Reactivity:</b>	Virus
<b>Immunogen Type:</b>	Conjugated Peptide
<b>Immunogen:</b>	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids from an internal region of FIV Matrix Protein p15.
<b>Purity/Specificity:</b>	This affinity purified antibody is directed against FIV Matrix Protein p15. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">NCBI - 120815</a></li><li>• <a href="#">UniProtKB - P16087</a></li><li>• <a href="#">GeneID - 1489988</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ELISA, WB
<b>Application Note:</b>	This affinity purified antibody has been tested for use in ELISA and western blotting and suitable for immunocytochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 15 kDa in size corresponding to FIV Matrix Protein p15 by western blotting in the appropriate cell lysate or extract.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:5,000 - 1:20,000
<b>IHC:</b>	User Optimized
<b>WB:</b>	1:1,000 - 1:10,000

## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	1.22 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	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 using Rockland's affinity purified anti-FIV Matrix Protein p15 to detect p15 in the culture supernatant of FIV-infected feline CrFK cells (lane 2, arrowhead). Lane 1 is an uninfected control. Virions were enriched by ultracentrifugation, lysed, resolved by electrophoresis, and transferred to nitrocellulose. The membrane was probed with the primary antibody at a 1:10,000 dilution. Personal Communication, B. Luttge, CCR-NCI, Frederick, MD.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.