

Anti-Feline Immunodeficiency Virus Matrix Protein p15 (RABBIT) Antibody FIV matrix protein p15 Antibody

Catalog # ASR5391

Specification

Anti-Feline Immunodeficiency Virus Matrix Protein p15 (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Feline immunodeficiency virus Virus Polyclonal WB, IHC, E, I, LCI 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.
Physical State Buffer	Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	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.
Preservative	0.01% (w/v) Sodium Azide

Anti-Feline Immunodeficiency Virus Matrix Protein p15 (RABBIT) Antibody - Additional Information

Gene ID 1489988

Other Names 1489988

Purity

This affinity purified antibody is directed against FIV Matrix Protein p15. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography.

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.



Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Feline Immunodeficiency Virus Matrix Protein p15 (RABBIT) Antibody - Protein Information

Name gag

Function

Matrix protein p15 forms the outer shell of the core of the virus, lining the inner surface of the viral membrane.

Cellular Location

[Matrix protein p15]: Virion. [Nucleocapsid protein p13]: Virion.

Anti-Feline Immunodeficiency Virus Matrix Protein p15 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Feline Immunodeficiency Virus Matrix Protein p15 (RABBIT) Antibody - Images



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.

Anti-Feline Immunodeficiency Virus Matrix Protein p15 (RABBIT) Antibody - 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.