# FeLV p27 (8D11): sc-65729



The Power to Question

### **BACKGROUND**

Feline leukemia virus (FeLV), a retrovirus that infects cats, is usually transmitted between infected cats through saliva or nasal secretions, though it can also be transmitted via urine, feces or milk. Once transmitted, the virus infects the epithelial cells, tonsillar B lymphocytes and macrophages of the cat, and subsequently enters the blood stream, eventually causing viremia. If the virus passes into the bone marrow, it will remain in the body of the cat for life. FeLV causes immunosuppression and kills about 30% of infected cats. Four subgroups of FeLV exist: FeLV-A, -B, -C and -T, but only subgroup A is transmissible between cats. p27 represents the major core protein of FeLV and may be useful in detection of the virus.

# **REFERENCES**

- Liu, W.T., et al. 1984. Appearance of cytotoxic antibody to viral gp70 on feline lymphoma cells (FL-74) in cats during ex vivo immunoadsorption therapy: quantitation, characterization, and association with remission of disease and disappearance of viremia. Proc. Natl. Acad. Sci. USA 81: 3516-3520.
- Snyder, H.W., et al. 1984. Clearance of feline leukemia virus from persistently infected pet cats treated by extracorporeal immunoadsorption is correlated with an enhanced antibody response to FeLV gp 70. J. Immunol. 132: 1538-1543.
- Faix, P.H., et al. 2002. Host range and receptor binding properties of vectors bearing feline leukemia virus subgroup B envelopes can be modulated by envelope sequences outside of the receptor binding domain. J. Virol. 76: 12369-12375.
- Miyazawa, T. 2002. Infections of feline leukemia virus and feline immunodeficiency virus. Front. Biosci. 7: 504-518.
- Nolen, R.S. 2004. Feline leukemia virus threatens endangered panthers.
  J. Am. Vet. Med. Assoc. 224: 1721-1722.
- 6. Endo, Y., et al. 2005. Prevalence of canine distemper virus, feline immunodeficiency virus and feline leukemia virus in captive African lions (*Panthera leo*) in Japan. J. Vet. Med. Sci. 66: 1587-1589.
- 7. Gomes-Keller, M.A., et al. 2005. Shedding of feline leukemia virus RNA in saliva is a consistent feature in viremic cats. Vet. Microbiol. 112: 11-21.
- 8. Torres, A.N., et al. 2005. Re-examination of feline leukemia virus: host relationships using real-time PCR. Virology 332: 272-283.
- 9. Cattori, V., et al. 2006. Rapid detection of feline leukemia virus provirus integration into feline genomic DNA. Mol. Cell. Probes 20: 172-181.

# SOURCE

FeLV p27 (8D11) is a mouse monoclonal antibody raised against FeLV p27.

# **PRODUCT**

Each vial contains 100  $\mu g$   $lgG_1$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

FeLV p27 (8D11) is recommended for detection of Gag p27 of FeLV origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); may cross-react with higher molecular weight Gag precursors containing p27.

Molecular Weight of FeLV p27: 28 kDa.

# **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com