SANTA CRUZ BIOTECHNOLOGY, INC.

FeLV gp85/gp70 (C9E10): sc-65660

SANTA CRUZ BIOTECHNOLOGY

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. FeLV glycoprotein 27 (gp27), glycoprotein 70 (gp70) and glycoprotein 85 (gp85) are envelope proteins that are commonly used to diagnose cats with the feline leukemia virus. Development in the cat of a high concentration of cytotoxic antibody against FeLV gp70 may play an important role in tumor regression as well as disappearance of FeLV infection.

REFERENCES

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3. 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.
4. Miyazawa, T. 2002. Infections of feline leukemia virus and feline immunodeficiency virus. Front. Biosci. 7: 504-518.
5. 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.
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SOURCE

FeLV gp85/gp70 (C9E10) is a mouse monoclonal antibody raised against amino acids 214-218 of FeLV gp70.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FeLV gp85/gp70 (C9E10) is recommended for detection of Env gp85 and Env gp70 of FeLV by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells); also recommended for capture ELISA with monoclonal antibody FeLV gp70 (C1G10): sc-65661.

Molecular Weight of FeLV gp85: 85 kDa.

Molecular Weight of FeLV gp70: 70 kDa.

STORAGE

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

PROTOCOLS

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