



FeLV gp70 (BDI712): sc-57732

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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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.
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SOURCE

FeLV gp70 (BDI712) is a mouse monoclonal antibody raised against FeLV viral lysate.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FeLV gp70 (BDI712) is recommended for detection of Env gp70 of FeLV origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of FeLV gp70: 70 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.