

REAGENTS PROVIDED

NorthernLights™ 637 (NL637)-conjugated mouse monoclonal anti-Digoxigenin: Supplied as a 10X solution of antibody in 0.5 mL PBS containing 0.09% sodium azide.

Clone #: 611621

Isotype: mouse IgG_{2A}

STORAGE

Reagents are stable for **twelve months** from date of receipt when stored in the dark at 2-8 °C.

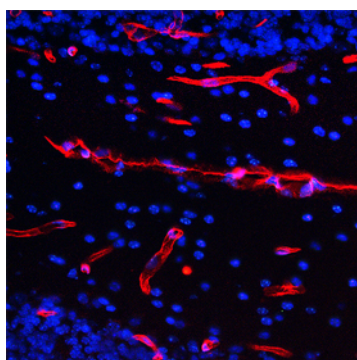
INTENDED USE

Designed to visualize the expression of Digoxigenin labeled proteins and nucleic acids and Digoxigenin conjugated primary antibodies by fluorescence microscopy in cells and tissues.

PRODUCT DESCRIPTION

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with Digoxigenin-KLH. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to fluorochrome NL637. The spectral characteristics of NL637 are provided, along with those of Allophycocyanin (APC), Alexa Fluor® 647, and Cy™5 for comparison.

Fluorochrome	Absorption Maximum (nm)	Emission Maximum (nm)
NL637	637	658
APC	645	660
Alexa Fluor® 647	650	668
Cy5	650	670



Digoxigenin-NL637

Fluorescent detection of mouse Netrin-4 in vasculature in cryostat sections of mouse brain (nucleus accumbens) using Goat Anti-Mouse Netrin-4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1132) conjugated to Digoxigenin and NL637-conjugated mouse anti-Digoxigenin (Catalog # NL7250V; red). Cell nuclei were counterstained with DAPI (blue).

BACKGROUND INFORMATION

Digoxigenin is a hapten, a small molecule with high immunogenicity, that is used in many molecular biology applications similarly to other popular haptens such as DNP (dinitrophenol), biotin, and fluorescein. Digoxigenin is a steroid found exclusively in the flowers and leaves of the plant genus *Digitalis*. Digoxigenin can be introduced into proteins and nucleic acids for detection in a variety of assays, including ELISA, Immunohistochemistry, *in situ* hybridization, Southern blot, and Western blot. Our high affinity anti-Digoxigenin antibodies are available unconjugated or with fluorescent NorthernLights™ dyes, Alexa Fluor® 488, biotin, HRP, or alkaline phosphatase conjugations.

REFERENCES

1. Décarie, A.A. *et al.* (1994) *Peptides* **15**(3):511.
2. Hauptmann, G. *et al.* (1994) *Trends in Genetics* **10**(8):266.
3. Goodarzi, M.T. *et al.* (1995) *Biochemical Society Transactions* **23**(2):168S.

FLUORESCENT STAINING VALIDATION

This antibody has been tested for immunofluorescence using normal mouse and rat brains fixed by transcardial perfusion with 4% formaldehyde/14% picric acid. Tissue sections were incubated with Digoxigenin-conjugated antibodies overnight at 4 °C. After washing with PBS, tissues were incubated with NL637-conjugated antibody at a final concentration of 1X (1:10 dilution) in diluent buffer for 1 hour at room temperature.

Warning: Contains sodium azide as a preservative. Sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.

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Alexa Fluor is a registered trademark of Life Technologies Corp.

Cy is a trademark of GE Healthcare.