

Anti-human SOX2-NL493

Catalog Number: NL20181G

Lot Number: ABKE02

100 Tests in 50 μ L staining volume

20 Tests in 250 μ L staining volume

Reagents Provided

NorthernLights™ 493 (NL493)-conjugated goat polyclonal anti-human SOX2: Supplied as a 10X solution of antibody in 0.5 mL PBS containing 0.09% sodium azide.

Isotype: goat IgG

Storage

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

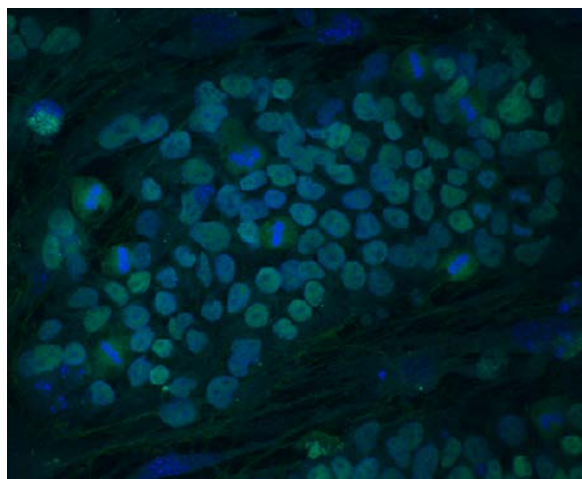
Intended Use

Designed to visualize the expression of SOX2 by fluorescence microscopy.

Product Description

Produced in goats immunized with purified, *E. coli*-derived, recombinant human SRY (sex determining region Y) box 2 (rhSOX2; aa 135 - 317). Human SOX2 specific IgG was purified by human SOX2 affinity chromatography. The purified antibody was then conjugated to fluorochrome NL493. The spectral characteristics of NL493 are provided, along with those of FITC and Alexa Fluor® 488 for comparison.

Fluorochrome	Absorption Maximum (nm)	Emission Maximum (nm)
NL493	493	514
FITC	492	520
Alexa Fluor 488	495	519



SOX2-NL493

BG01V cells were stained with NL493-conjugated anti-human SOX2 (Catalog # NL20181G, green) and counterstained with DAPI (blue).

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Alexa Fluor is a registered trademark of Invitrogen, Inc.
Triton is a registered trademark of Union Carbide Corp.

Background Information

SOX2 belongs to the SOX (SRY-like HMG box) family of transcription factors with diverse roles in development. SOX2 functions in specifying the first three lineages present at implantation and in regulating proliferation and differentiation in the developing peripheral nervous system.¹⁻⁵

References

- Graham, V. *et al.* (2003) *Neuron* **39**(5):749.
- Avilion, A.A. *et al.* (2003) *Genes Dev.* **17**(1):126.
- Kishi, M. *et al.* (2000) *Development* **127**(4):791.
- Yuan, H. *et al.* (1995) *Genes Dev.* **9**(21):2635.
- Uwanogho, D. *et al.* (1995) *Mech. Dev.* **49**(1-2):23.
- Stevanovic, M. (2003) *Mol. Biol. Rep.* **30**(2):127.

Immunocytochemistry Validation

This antibody has been tested for immunocytochemistry using BG01V cells. Cells were fixed in PBS containing 4% paraformaldehyde, and blocked with PBS containing 10% normal donkey serum, 0.1% Triton® X-100, and 1% BSA. After blocking, cells were incubated with NL493-conjugated antibody at a final concentration of 1X (1:10 dilution) in blocking buffer for 3 hours at room temperature in the dark. Between each step, cells were washed with PBS containing BSA. If a staining volume of 250 μ L is used, this kit can be used for 20 tests; 100 tests can be done in a staining volume of 50 μ L.

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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