

Reagents Provided

NorthernLights™ 493 (NL493)-conjugated affinity purified goat polyclonal anti-human Otx2: Supplied as a 10X solution of antibody in 0.5 mL PBS containing 0.09% sodium azide.

Isotype: goat polyclonal

Storage

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

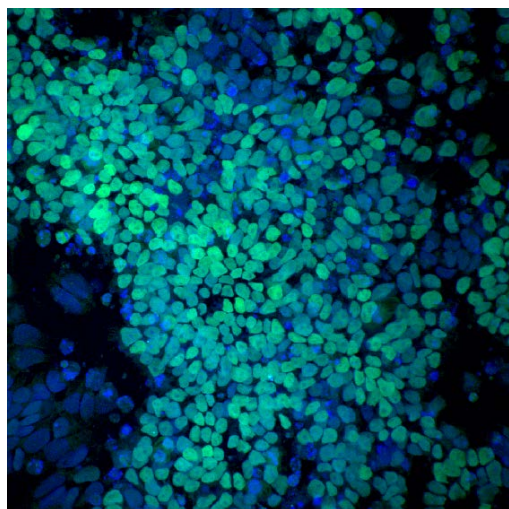
Intended Use

Designed to visualize the expression of Otx2 by fluorescence microscopy.

Product Description

This antibody was produced in goats immunized with purified, *E. coli*-derived recombinant human Otx2. Human Otx2 specific IgG was purified by human Otx2 affinity chromatography. The affinity 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 |



Otx2-NL493

Ectoderm differentiated BG01V cells were stained with NL493-conjugated anti-Otx2 (Catalog # NL1979G; green) and counterstained with DAPI (blue).

Background Information

Otx2 is a member of the bicoid subfamily of homeodomain-containing transcription factors. It may play a role in brain and sensory organ development (1). Isoform a differs from isoform b by having an eight amino acid residue insertion between P32 and A33 of Otx2b.

References

1. Nagao, T. *et al.* (1998) Proc. Natl. Acad. Sci. USA **95**:3737.

Immunocytochemistry Validation

This antibody has been tested for immunocytochemistry using ectoderm differentiated 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 µL is used, this kit can be used for 20 tests; 100 tests can be done in a staining volume of 50 µL.

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.

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

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