

Anti-human GATA-4-NL557

Catalog Number: NL2606R

Lot Number: AAWX02

100 Tests in 50 μ L staining volume

20 Tests in 250 μ L staining volume

Reagents Provided

NorthernLights™ 557 (NL557)-conjugated goat polyclonal anti-human GATA-4: Supplied as a 10X solution of antibody in 0.5 mL PBS containing 0.1% sodium azide.

Isotype: goat IgG

Storage

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

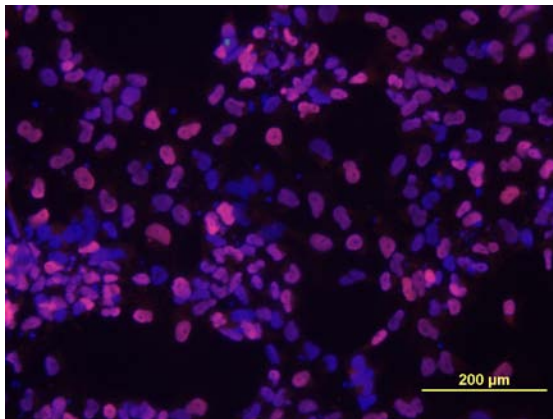
Intended Use

Designed to visualize the expression of human GATA-4 by fluorescence microscopy.

Product Description

Produced in goats immunized with purified, *E. coli*-derived, recombinant human GATA-4 (rhGATA-4). Human GATA-4 specific IgG was purified by human GATA-4 affinity chromatography. The purified antibody was then conjugated to fluorochrome NL557. The spectral characteristics of NL557 are provided, along with those of Rhodamine Red™-X (RRX) and Cy™3 for comparison.

Fluorochrome	Absorption Maximum (nm)	Emission Maximum (nm)
NL557	557	574
RRX	570	590
Cy3	548	562



Human GATA-4-NL557

Definitive endoderm differentiated BG01V cells were stained with NL557-conjugated anti-human GATA-4 (Catalog # NL2606R, red) and counterstained with DAPI (blue).

Background Information

GATA-4 belongs to the GATA family of transcription factors, which bind to the consensus DNA sequence (A/T) GATA (A/G) to control diverse tissue-specific programs of gene expression and morphogenesis. It is widely expressed in mesodermal- and endodermal-derived tissues. GATA-4 interacts with other transcription factors such as NKX2.5, and myocyte enhancer factor 2 to regulate cardiac myocyte-specific gene expression. Human GATA-4 shares 93%, 93% and 92% amino acid sequence identity with porcine, rat and mouse GATA-4, respectively.

Immunocytochemistry Validation

This antibody has been tested for immunocytochemistry using definitive endoderm 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 NL557-conjugated antibody at a final concentration of 1X (1:10 dilution) in blocking buffer for 3 hours 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.

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

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