



Human EMT 3-Color Immunocytochemistry Kit

Catalog Number: SC026

Size: 25 Tests

Product Description

This kit contains three fluorochrome-conjugated antibodies that can be used for single-step immunocytochemical staining in the analysis of human epithelial to mesenchymal transition (EMT). Each antibody is supplied as 125 μ L of a 10X solution in PBS containing 0.1% sodium azide.

- Anti-human Snail NL557-Conjugated Goat IgG (Part 967246)
- Anti-human E-Cadherin NL637-Conjugated Goat IgG (Part 967247)
- Anti-human Vimentin NL493-Conjugated Rat IgG_{2A} (Part 967248)

The spectral characteristics of each of the fluorochromes used are described below.

Fluorochrome	Absorption Maximum (nm)	Emission Maximum (nm)
NL557	557	574
NL637	637	658
NL493	493	514

Intended Use

This product is designed for the immunocytochemical analysis of human EMT using three fluorochrome-conjugated antibodies.

Storage

Store at 2-8 °C in the dark. Use within 6 months of receipt.

Precaution

Sodium azide may react with lead and copper plumbing to form explosive metallic azides. Flush with large volumes of water during disposal.

Immunocytochemistry Validation

These antibodies have been tested for immunocytochemical staining using A549 human lung carcinoma cells treated with 10 ng/mL of TGF- β 1 for 48 hours. Cells were fixed in PBS containing 4% paraformaldehyde and blocked with PBS containing 10% normal donkey serum, 0.3% Triton™ X-100, and 1% BSA. After blocking, cells were incubated in blocking buffer with all three conjugated antibodies for 3 hours at room temperature in the dark; each at a final concentration of 1X (1:10 dilution). Between each step, cells were washed with PBS containing BSA. When using a staining volume of 50 μ L, this kit contains sufficient material for 25 tests.

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.

R&D Systems, Inc.
1-800-343-7475

Data Examples

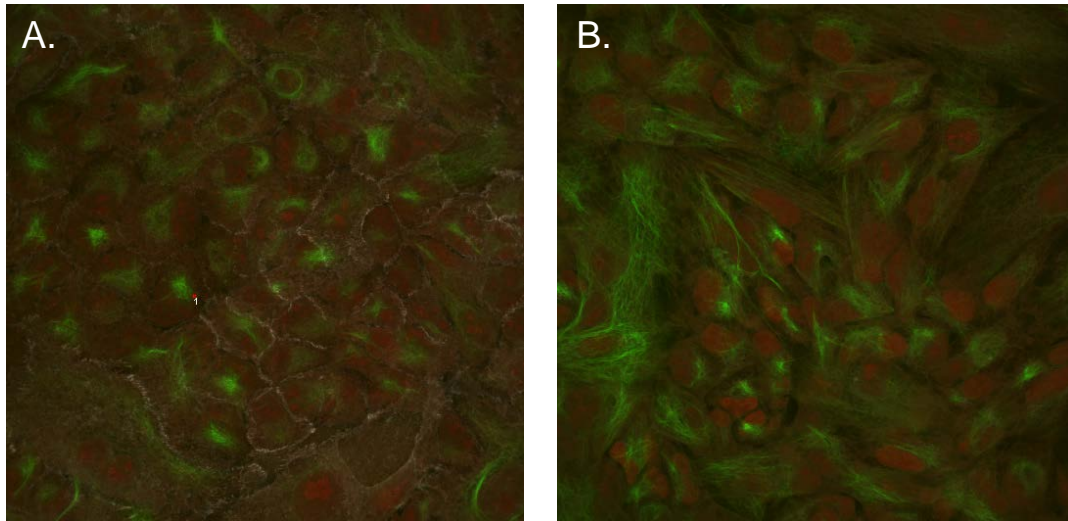


Figure 1: Detection of EMT in TGF- β 1-treated Human Lung Carcinoma Cells using the Human EMT 3-Color Immunocytochemistry Kit. A549 human lung carcinoma cells were either untreated (A) or treated (B) with recombinant human TGF- β 1 (R&D Systems, Catalog # 240-B) for 48 hours. The cells were analyzed for an epithelial-to-mesenchymal transition (EMT) by simultaneously staining with antibodies contained in this kit, including NorthernLights™ 637-conjugated anti-human E-Cadherin (white), NorthernLights 493-conjugated anti-human Vimentin (green), and NorthernLights 557-conjugated anti-human Snail (red). Induction of EMT following TGF- β 1 treatment was revealed by down-regulation of E-Cadherin and concurrent up-regulation of Vimentin and Snail.

**For full-color images, please refer to our website
(www.RnDSystems.com/pdf/SC026.pdf)**

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