

Human EMT 3-Color Immunocytochemistry Kit

Catalog Number: SC026

Size: 25 Tests

INTENDED USE

This product is designed for the immunocytochemical analysis of human Epithelial to Mesenchymal Transition (EMT) using three fluorochrome-conjugated antibodies.

PRODUCT DESCRIPTION

This kit contains three fluorochrome-conjugated antibodies that can be used for single-step immunocytochemical staining in the analysis of human EMT, (including E.Cadherin, epithelial; snail, mesenchymal; and Vimentin, mesenchymal). Each antibody is supplied as 125 µL of a 10X solution in PBS containing < 0.1% sodium azide.

This package insert must be read in its entirety before using this product.
For research use only. Not for use in diagnostic procedures.

Manufactured and Distributed by:

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MATERIALS PROVIDED & STORAGE CONDITIONS

Store the unopened kit at 2-8 °C **in the dark**.

Use within 6 months of receipt.

PART	PART #	DESCRIPTION
Anti-human Snail NL557-Conjugated Goat IgG	967246	125 µL of a 10X solution in PBS containing < 0.1% sodium azide.
Anti-human E-Cadherin NL637-Conjugated Goat IgG	967247	
Anti-human Vimentin NL493-Conjugated Rat IgG _{2A}	967248	

SPECTRAL CHARACTERISTICS

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

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

PRECAUTIONS

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

Wear protective gloves, clothing, eye, and face protection. Wash hands thoroughly after handling. Refer to the MSDS on our website prior to use.

IMMUNOCYTOCHEMISTRY VALIDATION

These antibodies have been tested for immunocytochemical staining using A549 human lung carcinoma cells treated with 10 ng/mL of TGF-β1 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 µL, this kit contains sufficient material for 25 tests.

DATA EXAMPLES

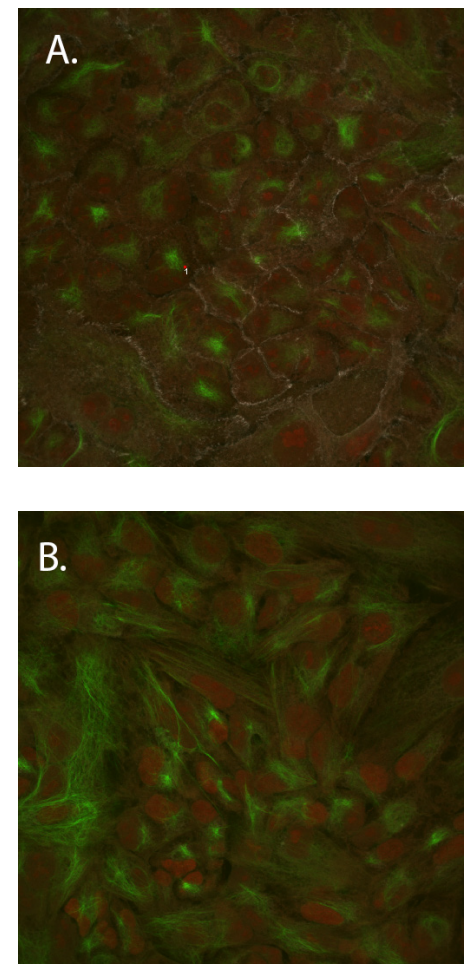


Figure 1: Detection of EMT in TGF-β1-treated Human Lung Carcinoma Cells using the Human EMT 3-Color Immunocytochemistry Kit. A549 human lung carcinoma cells were either untreated (**A**) or treated (**B**) with Recombinant Human TGF-β1 (R&D Systems®, Catalog # 240-B) for 48 hours. The cells were analyzed for EMT by simultaneously staining with antibodies contained in this kit, including NorthernLights™ (NL) 637-conjugated Anti-human E-Cadherin (white), NL493-conjugated Anti-human Vimentin (green), and NL557-conjugated anti-human Snail (red). Induction of EMT following TGF-β1 treatment was revealed by down-regulation of E-Cadherin and concurrent up-regulation of Vimentin and Snail.