

Description

The EMT Essentials Antibody Kit provides a cost-effective tool for studying key cell markers, transcription factors, and ECM degraders involved in the epithelial to mesenchymal transition (EMT). Perfect for cancer and developmental biology researchers starting a new project, screening multiple prospective targets, or those who simply require less volume.

Product Information

The EMT Essentials Antibody Kit contains antibodies against 5 key protein targets that play critical roles in epithelial to mesenchymal transition.

Antigen	Catalog No.	Host, clonality	Tested Reactivity	Applications	Volume
E-cadherin	60335-1-Ig	Mouse monoclonal	H, R, Pg	WB, IHC, IF, FC, ELISA	20 uL
N-cadherin	66219-1-Ig	Mouse monoclonal	H, M, R, Pg, Rb	WB, IHC, IF, ELISA	20 uL
Vimentin	80232-1-RR	Rabbit monoclonal	H, M, R	WB, IHC, IF, ELISA	20 uL
SNAIL1	13099-1-AP	Rabbit polyclonal	H, M, R	WB, IHC, IP, ELISA	20 uL
MMP-2	66366-1-Ig	Mouse monoclonal	H, M, R, Pg	WB, IHC, ELISA	20 uL

Also see our 'EMT Expanded Antibody Sampler Kit' on the following page
<https://www.ptglab.com/products/EMT-Expanded-Antibody-Kit-PK30015.htm>

Package

5 × 20 uL

Storage

Store at -20°C. Stable for one year from the date of receipt.

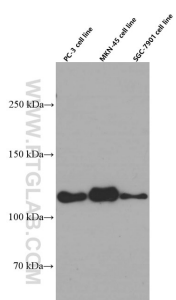
Background Information

The epithelial to mesenchymal transition (EMT) is a process by which epithelial cells transform into mesenchymal cells, allowing them to gain migratory and invasive properties. While a normal feature of embryonic development and tissue regeneration, EMT is often upregulated and becomes a key driver of metastases in several cancers including colorectal, breast, gastric, and melanoma. The EMT process itself typically involves the loss of epithelial markers such as E-cadherin and upregulation of mesenchymal markers such as fibronectin, N-cadherin, and Vimentin. It also requires the expression of transcription factors such as Snail, Slug, and Twist, which help to drive the transition into the mesenchymal phenotype. Matrix metalloproteinases (MMPs) additionally degrade the surrounding extracellular matrix and allow for the transformed cells to collectively migrate. The EMT process is commonly confirmed in cancer cells and tissue through western blot and immunohistochemistry.

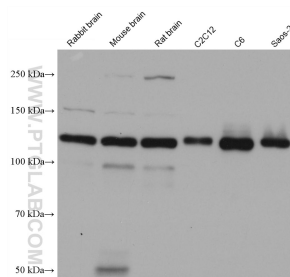
Standard Protocols

Click [here](#) to view our standard protocols for various applications including WB, IP, IHC, IF, FC, and ELISA.

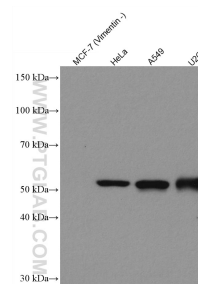
Validation Data



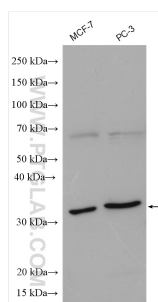
PC-3, MKN-45, SGC-7901 cells were subjected to SDS PAGE followed by western blot with 60335-1-Ig (E-cadherin Antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



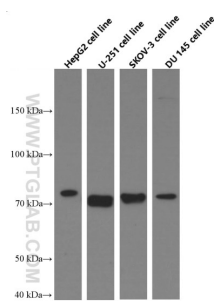
Various lysates were subjected to SDS PAGE followed by western blot with 66219-1-Ig (N-cadherin antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



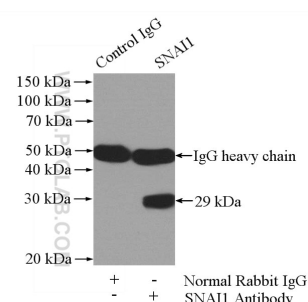
Various lysates were subjected to SDS PAGE followed by western blot with 80232-1-RR (Vimentin antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



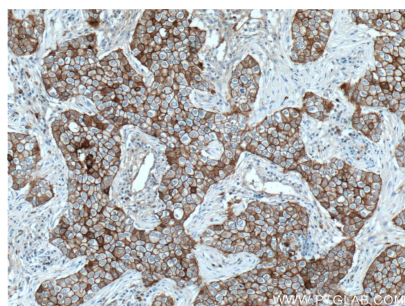
Various lysates were subjected to SDS PAGE followed by western blot with 13099-1-AP (SNAIL1 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



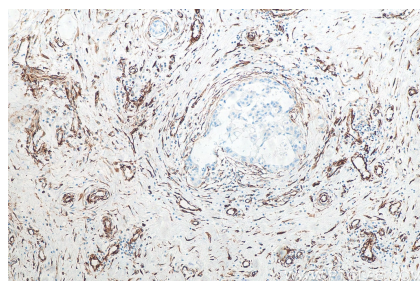
Western blot analysis of MMP2 in various cell lines using Proteintech antibody 66366-1-Ig (MMP2 Antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



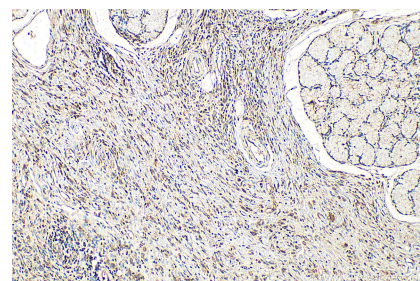
IP Result of anti-SNAIL1 (IP:13099-1-AP, 4ug; Detection:13099-1-AP 1:600) with MCF-7 cells lysate 1040ug.



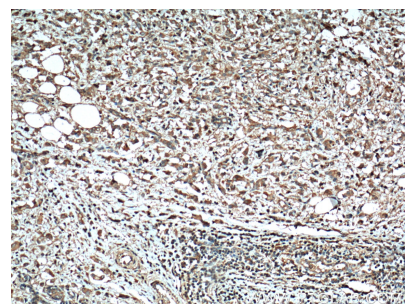
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60335-1-Ig (E-cadherin antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



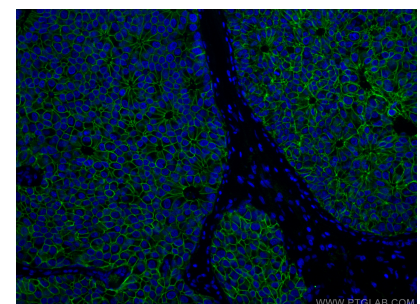
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 80232-1-RR (Vimentin antibody) at dilution of 1:2500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



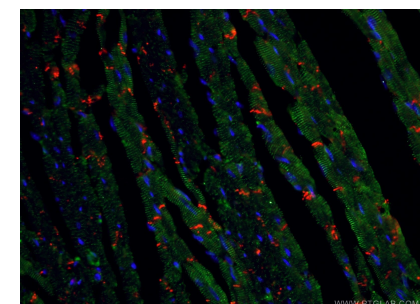
Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 13099-1-AP (SNAIL1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66366-1-Ig (MMP2 antibody) at dilution of 1:300 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using E-cadherin antibody (60335-1-Ig, Clone: 6B11F11) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 66219-1-Ig (N-cadherin antibody) at dilution of 1:100 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). The section was co-stained with 11313-2-AP (alpha Actinin) in green.

For technical support and original validation data for this product please contact

T: 1 (888) 4PTGLAB(1-888-478-4522)(toll free in USA), or 1(312) 455-8498(outside USA)

E: proteintech@ptglab.com
W: ptglab.com

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