

Products for the Study of Epithelial-Mesenchymal Transition



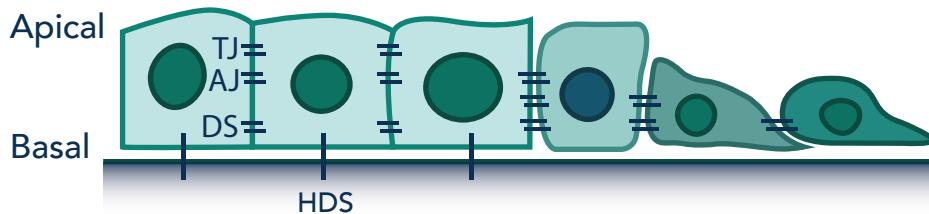
MET

Organ Formation Reprogramming to iPSCs
Epithelial homeostasis Metastatic colonization

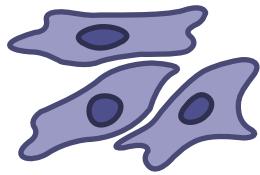
EMT

Embryo Development Fibrosis
Wound Healing Cancer metastasis

Epithelial Phenotype



Mesenchymal Phenotype



Legend

TJ - Tight junction AJ - Adherens junction DS - Desmosome HDS - Hemidesmosome

- Cuboid/cobblestone shape
- Stationary/non-mobile

Phenotypic Characteristics

- Spindle or fibroblastoid shape
- Increase in migratory and invasive capacity

GATA3/GATA4, FOXA1/FOXA2, Klf4/Klf5, HNF4 α , Grhl2/Grhl3, Ovol1/Ovol2, ESE-1, Elf3

Transcription Factors

Twist, Snail, Slug, ZEB1/2, E47, STAT3, β -catenin, Nanog, Smad2/3/4, E2F1, TCF3/LEF1, AP-1, FosB, FosL1/2, Jun, JunB, ATF4, SOX4/SOX9

ZO-1/ZO-3, EpCAM, Occludin-1, Integrin α 3 β 1, E-cadherin, Claudin-3 and -4, Desmoplakin

Cell Junctions

N-cadherin, MMP-14, Integrin α 5 β 1, Integrin α v β 3, ADAM10, -12, -17, and -19, MUC-1, -4, and -16, Integrin α v β 6, CD44

Cytokeratins (CK8, 18, 19)
Cortical actin

Cytoskeletal Proteins

Vinculin, Vimentin, Cytokeratin (CK14), α -SMA, Paxillin, Talin

Collagen IV, Laminin, Agrin, and Perlecan

Secreted Factors

Collagen IV α 1/2, Fibronectin 1, Laminin γ 2, Collagen I α 1

Data and image adapted from Lai et al. and Olea-Flores et al. 2020 PMID: 32850862, 33334030.

Primary Antibodies

Product	Applications	Fluorescent Dyes
GATA3	WB, IHC, IF, ELISA, ChIP	★
GATA4	WB, IP, IHC, IF, ChIP	
FOXA1	WB, IHC	
FOXA2	WB, IP, IHC, IF, ChIP	
KLF4	WB, IP, IHC, IF, FC, ChIP	
KLF5	WB, IP, IHC, IF, ELISA, ChIP	
OVOL1	WB, IP, ELISA	
Twist1	WB, IP, IHC, IF, ChIP	
Snail	WB, IP, IF, ELISA, ChIP	
Slug	WB, IHC, IF, FC, ELISA	
ZEB1	WB, IP, IHC, IF, ELISA, ChIP	
ZEB2	WB, IHC, IF	
E47/E2A	WB, IP, IF	★
STAT3	WB, IP, IHC, IF, FC, ELISA, ChIP	★
B-catenin	WB, IP, IHC, IF, FC, ELISA, ChIP	★
Nanog	WB, IHC, IF, FC, ELISA	
Smad2	WB, IP, IHC, IF, ELISA, ChIP	
Smad3	WB, IHC, IF, ELISA	
Smad4	WB, IP, IHC, IF, ELISA, ChIP	
E2F1	WB, IP, IF, ELISA, ChIP	
TCF3	WB, IP, IHC, IF, ELISA, ChIP	★
LEF1	WB, IP, IHC, IF, ELISA	
AP-1/JUN	WB, IP, IHC, IF, ELISA, ChIP	
FOSL2	WB, IHC, ELISA	
JUNB	WB, IP, IHC, IF, ELISA	
ATF4	WB, IP, IHC, IF, FC, ELISA, ChIP	★
SOX9	WB, IF, FC	
ZO-1	WB, IP, IHC, IF, FC, ELISA	★

Product	Applications	Fluorescent Dyes
ZO-3	WB, ELISA	
EpCAM	WB, IHC, IF, FC, ChIP	★
Occludin	WB, IP, IHC, IF, FC, ELISA	★
E-cadherin	WB, IP, IHC, IF, FC, ELISA	★
Claudin 3	IP, IHC, IF, ELISA	
Claudin 4	WB, IP, IHC, IF	
Desmoplakin	WB, IHC, IF, ELISA	
N-cadherin	WB, IP, IHC, IF, FC, ELISA	★
MMP-14	WB, IHC, IF, ELISA	
ADAM10	WB, IHC, IF, ELISA	
ADAM12	WB, IP, IHC, IF, FC, ELISA	
ADAM17	WB, IHC, ELISA	
MUC1	WB, IHC, FC	
MUC2	WB, IHC, IF	
MUC4	WB, IHC	
MUC16	WB, IP, IHC, ELISA	
CD44	WB, IP, IHC, IF, FC, ELISA	★
Cytokeratin 8	WB, IP, IHC, IF, FC	
Cytokeratin 14	WB, IP, IHC, IF, FC, ELISA	★
Cytokeratin 18	WB, IP, IHC, IF, FC, ELISA	★
Cytokeratin 19	WB, IHC, IF, FC, ELISA	★
Vinculin	WB, IP, IHC, IF, FC, ELISA	
Vimentin	WB, IP, IHC, IF, FC, ELISA	★
α SMA	WB, IP, IHC, IF, FC, ELISA	★
Paxillin	WB, IP, IHC, IF, ELISA	
Talin-1	WB, IHC, IF, FC	
Collagen IV	WB, IP, IHC, IF, ELISA	★

IHCeasy Ready-To-Use IHC Kits

Kit Name	Cat. No.	Species Reactivity	Sample Type
IHCeasy Beta Catenin Ready-To-Use IHC Kit	KHC0008	Human, mouse, rat	FFPE tissue
IHCeasy CD44 Ready-To-Use IHC Kit	KHC0030	Human	FFPE tissue
IHCeasy CK8 Ready-To-Use IHC Kit	KHC0041	Human, mouse, rat	FFPE tissue
IHCeasy CK18 Ready-To-Use IHC Kit	KHC0032	Human	FFPE tissue
IHCeasy CD19 Ready-To-Use IHC Kit	KHC0033	Human, rat	FFPE tissue
IHCeasy N-Cadherin Ready-To-Use IHC Kit	KHC0011	Human, mouse, rat	FFPE tissue
IHCeasy α SMA Ready-To-Use IHC Kit	KHC0053	Human, mouse, rat	FFPE tissue
IHCeasy Vimentin Ready-To-Use IHC Kit	KHC0039	Human	FFPE tissue
IHCeasy EPCAM Ready-To-Use IHC Kit	KHC0085	Human	FFPE tissue
IHCeasy E-cadherin Ready-To-Use IHC Kit	KHC0010	Human, rat	FFPE tissue
IHCeasy Integrin α1 Ready-To-Use IHC Kit	KHC0111	Human	FFPE tissue