

Figure S2. Mucin-1 expression in relation to cell adhesion of different cell lines in RPM experiments. **(A)** Immunofluorescence of RPM-induced mucin-1 (green) in adherently growing thyroid (cancer) cells after 72 h. Schematic diagrams show expected spheroid formation in the respective cell cultures; **(B)** Basal mucin-1 expression (green) in other cancer cells studied on the RPM. Schematic diagrams show expected spheroid formation in the respective cell cultures; **(C)** While LnCAP prostate cancer cells in normal RPMI-1640 medium express mucin-1 (green fluorescence) on the RPM and adhere poorly, the addition of 0.1 nM dihydrotestosterone (DHT) led to a decrease in the amount of mucin-1 and thus increased adherence. Scale bars: 300 μ m.

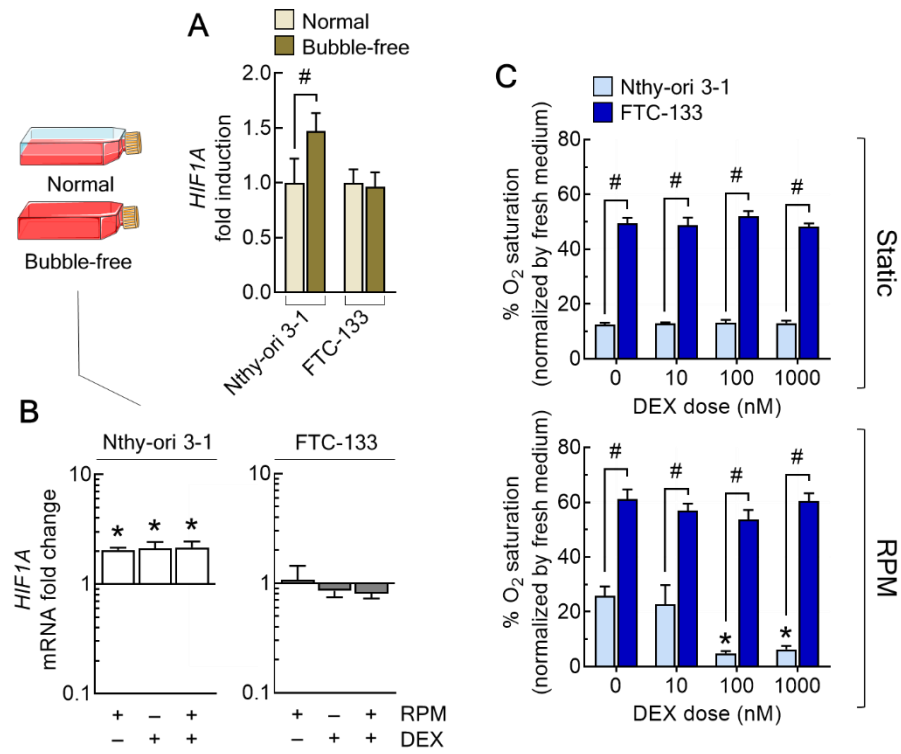


Figure S3. Oxygen saturation and hypoxia-induced expression of *HIF1A* in completely filled cell culture flasks. **(A)** Expression levels (mRNA) of the *HIF1A* gene ($n=5$); **(B)** Fold changes of *HIF1A* expression under the different culture conditions ($n=5$); **(C)** Oxygen levels in completely filled cell culture flasks after 72 h ($n=3$). * $p < 0.05$ vs. control condition (-DEX/-RPM); # $p < 0.05$.

Table S1. Antibodies used for immunofluorescence and Western blot analyses.

Antibody (anti-...)	Company, Product Nr.	Species ¹	MW (kDa)	Dilution IF ²	Dilution WB ²
β-catenin	Invitrogen, #71-2700	Rb	94	3 µg/mL	
Claudin-1	Invitrogen, #37-4900	Ms		3 µg/mL	
Collagen I	Invitrogen, #MA1-26771	Ms		1:2000	
Collagen IV	Invitrogen, #PA5-104508	Rb		1:300	
E-cadherin	Invitrogen, #MA5-11496	Ms		2 µg/mL	
FAK	Abcam, #ab40794	Rb		1:1000	
Fibronectin	Sigma, #F3648	Rb		1:400	
GAPDH	Invitrogen, #398600	Ms	~37		1:2000
GR	Sigma, #HPA004248	Rb	~110	1 µg/mL	1:2000
Integrin-β1	R&D Systems, #MAB17781	Ms		1:500	25 µg/mL
Laminin	Invitrogen, #PA1-16730	Rb		1:100	
MMP-2	Invitrogen, #436000	Ms	72		2 µg/mL
MMP-9	Invitrogen, #MA5-32705	Ms	~100		1:500
Mucin-1	Invitrogen, #MA1-35039	Ms		1:100	
p38 MAPKα	Invitrogen, #MA5-15116	Ms	46	1:1000	1:1000
p-GR (Ser 211)	Invitrogen, #PA5-17668	Rb	~86		1:500
p-p38 (Thr180, Tyr182)	Invitrogen, #44-684G	Rb	~38		1:500
ZO-1	Invitrogen, #40-2200	Rb		3.5 µg/mL	
ZO-2	Invitrogen, #71-1400	Rb		1 µg/mL	

Secondary Antibody	Company, Product Nr.	Labelling ³	Dilution IF ²	Dilution WB ²	
				Prim. AB	Factor
anti-Mouse	Invitrogen, #A-11001	AF488	1 µg/mL		
	Invitrogen, #A-21235	AF647	2 µg/mL		
	Invitrogen, #31430	HRP		p38 MAPKα	1:6000
				GAPDH	1:50,000
				MMP-2	1:2000
anti-Rabbit	Invitrogen, #A-11008	AF488	4 µg/mL		
	Invitrogen, #A-21244	AF647	4 µg/mL		
	Invitrogen, #31460	HRP		MMP-9	1:1000
				GR	1:10,000
				p-GR	1:10,000
				p-p38	1:10,000

¹ Ms: mouse; Rb: rabbit; ² IF, immunofluorescence; WB, Western blot; ³ AF, Alexa Fluor; HRP, horseradish peroxidase.

Table S2. Primer sequences for quantitative real-time PCR.

Gene	Primer Name	Sequence (5'→3')
<i>18S rRNA</i>	18S-F	GGAGCCTGCGGCTTAATTT
	18S-R	CAACTAAGAACGGCCATGCA
<i>CXCL8</i>	CXCL8-F	TGGCAGCCTTCCTGATTTCT
	CXCL8-R	GGGTGGAAGGTTTGGAGTATG
<i>DUSP1</i>	DUSP1-F	AGGACAACCACAAGGCAGAC
	DUSP1-R	TCCAGCATTCTTGATGGAGTCTATG
<i>FKBP5</i>	FKBP5-F	AACCCCCAGAATAAGGCTGC
	FKBP5-R	TTGGCGTATATCCTGCGGTC
<i>HIF1A</i>	HIF1A-F	TGCTTTAACTTTGCTGGCCC
	HIF1A-R	AGTTTCTGTGTCGTTGCTGC
<i>IL1B</i>	IL1B-F	TTCGAGGCACAAGGCACAA
	IL1B-R	TGGCTGCTTCAGACACTTGAG
<i>IL6</i>	IL6-F	CGGGAACGAAAGAGAAGCTCTA
	IL6-R	GAGCAGCCCCAGGGAGAA
<i>MAPK14</i>	MAPK14-F	TGTTTCCTGGTACAGACCATATT
	MAPK14-R	CATGGCTTGGCATCCTGTT
<i>MUC1</i>	MUC1-F	CCTCACAGTGCTTACAGTTGTT
	MUC1-R	GCTGGGCACTGAACTTCTCT
<i>MYC</i>	MYC-F	GGATTCTCTGCTCTCCTCGAC
	MYC-R	CTTCTTGTTCCCTCCTCAGAGTC
<i>NR3C1</i>	NR3C1-F	GTTGTTTATCTCGGCTGCGG
	NR3C1-R	TCAGTGAATATCAACTCTGGCA