

Materials List for:

Studying Cell Cycle-regulated Gene Expression by Two Complementary Cell Synchronization Protocols

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Materials

Name	Company	Catalog Number	Comments
DMEM, high glucose, GutaMAX supplement	Thermo Fisher Scientific	61965-059	
FBS, qualified, E.U.-approved, South America origin	Thermo Fisher Scientific	10270-106	
Penicillin-Streptomycin (10,000 U/mL)	Thermo Fisher Scientific	15140-122	
0.25% Trypsin-EDTA (1x), phenol red	Thermo Fisher Scientific	25200-072	
Thymidine	SIGMA	T1895-5G	Freshly prepared. Slight warming might help dissolve thymidine.
Nocodazole	SIGMA	M-1404	Stock solution in DMSO stored at -20 °C in small aliquots
Hydroxyurea	SIGMA	H8627	Freshly prepared
Mitomycin C from Streptomyces caespitosus	SIGMA	M4287	1.5 mM stock solution in sterile H ₂ O protected from light and stored at 4 °C
Dimethyl sulfoxide	SIGMA	D2650	
Propidium iodide	SIGMA	P4170	Stock solution in sterile PBS at 5 mg/ml, stored at 4 °C protected from light.
PBS pH 7.6			Home made
Ethanol	PANREAC	A3678,2500	
Chloroform	SIGMA	C2432	
Sodium Citrate	PANREAC	131655	
Triton X-100	SIGMA	T8787	
RNAse A	Thermo Fisher Scientific	EN0531	
TRIzol Reagent	LifeTechnologies	15596018	
RNeasy Mini kit	QIAGEN	74106	
High-Capacity cDNA Reverse Transcription Kit	Thermo Fisher Scientific	4368814	
Anti-Cyclin E1 antibody	Cell Signaling	4129	1:1000 dilution in 5% milk, o/n, 4 °C
Anti-Cyclin B1 antibody	Cell Signaling	4135	1:1000 dilution in 5% milk, o/n, 4 °C
Anti-β-actin	SIGMA	A-5441	1:3000 dilution in 5 % milk, 1 hr, RT
Anti-pH3 (Ser 10) antibody	Millipore	06-570	Specified in the protocol

Secondary anti-rabbit AlexaFluor 488 antibody	Invitrogen	R37116	Specified in the protocol
Secondary anti-mouse-HRP antibody	Santa Cruz Biotechnology	sc-3697	1:3000 dilution in 5 % milk, 1 hr, RT
Forward E2F1 antibody (human) TGACATCACCAACGTCCTTGA	Biolegio		Designed by PrimerQuest tool (https://eu.idtdna.com/site)
Reverse E2F1 antibody (human) CTGTGCGAGGTCCTGGGTC	Biolegio		Designed by PrimerQuest tool (https://eu.idtdna.com/site)
Forward E2F7 antibody (human) GGAAAGGCAACAGCAAACCTCT	Biolegio		Designed by PrimerQuest tool (https://eu.idtdna.com/site)
Reverse E2F7 antibody (human) TGGGAGAGCACCAAGAGTAGAAGA	Biolegio		Designed by PrimerQuest tool (https://eu.idtdna.com/site)
Forward p21 ^{Cip1} antibody (human) AGCAGAGGAAGACCATGTGGAC	Biolegio		Designed by PrimerQuest tool (https://eu.idtdna.com/site)
Reverse p21 ^{Cip1} antibody (human) TTTCGACCCTGAGAGTCTCCAG	Biolegio		Designed by PrimerQuest tool (https://eu.idtdna.com/site)
Forward TBP antibody (human) reference gene	Biolegio		Designed by PrimerQuest tool (https://eu.idtdna.com/site)
Reverse TBP antibody (human)	Biolegio		Designed by PrimerQuest tool (https://eu.idtdna.com/site)
Forward Oxa1L antibody (human) reference gene CACTTGCCAGAGATCCAGAAG	Biolegio		Designed by PrimerQuest tool (https://eu.idtdna.com/site)
Reverse Oxa1L antibody (human) CACAGGGAGAATGAGAGGTTATAG	Biolegio		Designed by PrimerQuest tool (https://eu.idtdna.com/site)
Power SYBRGreen PCR Master Mix	Thermo Fisher Scientific	4368702	
FACS Tubes	Sarstedt	551578	
MicroAmp Optical 96-Well Reaction Plate	Thermo Fisher Scientific	N8010560	
Corning 100 mm TC-Treated Culture Dish	Corning		
Corning Costar cell culture plates 6 well	Corning	3506	
Refrigerated Bench-Top Microcentrifuge	Eppendorf	5415 R	
Refrigerated Bench-Top Centrifuge Jouan CR3.12	Jouan	743205604	
NanoDrop Lite Spectrophotometer	Thermo Scientific	ND-LITE-PR	
BD FACSCalibur Flow Cytometer	BD Bioscience		
QuantStudio 3 Real-Time PCR System	Thermo Fisher Scientific	A28567	