

Cost-Efficient Transcriptomic-Based Drug Screening

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Materials

Name	Company	Catalog Number	Comments
50 mL conical tube	fisher scientific	10203001	
Adhesive PCR Plate Seals	Thermo Fisher Scientific	AB0558	
Amplicon Tagment Mix (ATM)	Illumina	FC-131-1096	Nextera XT DNA Library Prep Kit (96 samples)
AMPure XP beads	Beckman Coulter	A 63881	
Betaine	Sigma-Aldrich	61962	
Cell culture grade 96-well plates	Thermo Fisher Scientific	260860	
Cell culture vacuum pump (VACUSAFE)	Integra Bioscience	158300	
Deoxynucleotide triphosphates (dNTPs) mix 10 mM each	Fermentas	R0192	
DMSO	Sigma-Aldrich	276855	
DTT (100 mM)	Invitrogen	18064-014	
EDTA	Sigma-Aldrich	798681	for adherent cells
Ethanol	Sigma-Aldrich	51976	
Fetal Bovine Serum	Thermo Fisher Scientific	26140079	
Filter tips (10 µL)	Gilson	F171203	
Filter tips (100 µL)	Gilson	F171403	
Filter tips (20 µL)	Gilson	F171303	
Filter tips (200 µL)	Gilson	F171503	
Guanidine Hydrochloride	Sigma-Aldrich	G3272	
ISPCR primer (10 µM)	Biomers.net GmbH	SP10006	5'-AAGCAGTGGTATCAACGCAGAG T-3'
KAPA HiFi HotStart ReadyMix (2X)	KAPA Biosystems	KK2601	
Magnesium chloride (MgCl ₂)	Sigma-Aldrich	M8266	
Magnetic stand 96	Ambion	AM10027	
Neutralize Tagment (NT) Buffer	Illumina	FC-131-1096	Nextera XT DNA Library Prep Kit (96 samples), alternatively 0.2 % SDS
Nextera-compatible indexing primer	Illumina		

Nuclease-free water	Invitrogen	10977049	
PBS	Thermo Fisher Scientific	AM9624	
PCR 96-well plates	Thermo Fisher Scientific	AB0600	
PCR plate sealer	Thermo Fisher Scientific	HSF0031	
Penicillin / Streptomycin	Thermo Fisher Scientific	15070063	
Qubit 4 fluorometer	Invitrogen	15723679	
Recombinant RNase inhibitor (40 U/ul)	TAKARA	2313A	
RPMI-1640 cell culture medium	Gibco	61870036	If not working with PBMCs, adjust to cell type
SMART dT30VN primer	Sigma-Aldrich		5' Bio-AAGCAGTGGTATCAACGCAGAG TACT30VN-3
Standard lab equipment	various	various	e.g. centrifuge, ice machine, ice bucket, distilled water, water bath
SuperScript II Reverse Transcriptase (SSRT II)	Thermo Fisher Scientific	18064-014	
SuperScript II Reverse Transcriptase (SSRT II) buffer (5x)	Thermo Fisher Scientific	18064-014	
Tagment DNA Buffer (TD)	Illumina	FC-131-1096	Nextera XT DNA Library Prep Kit (96 samples)
TapeStation system 4200	Agilent	G2991BA	
Thermocycler (S1000)	Bio-Rad	1852148	
TSO-LNA (100 uM)	Eurogentec		5' Biotin AAGCAGTGGTATCAACGCAGAG TACAT(G)(G){G
Vortex-Genie 2 Mixer	Sigma-Aldrich	Z258415	