

Using Next Generation Sequencing to Identify Mutations Associated with Repair of a CAS9-induced Double Strand Break Near the CD4 Promoter

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Materials

Name	Company	Catalog Number	Comments
6 Well Tissue Culture Plate	Celltreat	229106	Cell culture plate
BCA Kit	VWR	89167-794	BCA assay kit
Centrifuge 5910 R	Eppendorf	2231000772	Tabletop Centrifuge
CLC Genomic Workbench	Qiagen	832001	deep sequence data analysis software/indel caller/variant caller
Digital Microplate Genie pulse	Scientific industries	SI-400A	Plate shaker
DYKDDDDK Tag Monoclonal Antibody (FG4R)	ThermoFisher Scientific	MA191878	Anti-FLAG antibody
Epilife CF Kit	ThermoFisher Scientific	MEPICF500	Cell culture media and supplements
Fetal Bovine Serum (FBS)	VWR	89510-194	Cell culture supplement
Goat anti-Rabbit IgG	ThermoFisher Scientific	A-11012	Secondary antibody
HighPrep PCR Clean-up system	MagBio	AC-60005	Bead-based PCR cleanup kit
KAPA HiFi HotStart ReadyMix PCR Kit	KAPA Biosystems	KK2600	PCR mastermix/PCR assay
MagAttract HMW DNA kit	Qiagen	67563	High Molecular Weight DNA extraction kit
Magnetic Stand-96	Thermo Fisher Scientific	AM10027	96-Well Magnetic Rack
MiniAmp Thermal Cyclor	Applied Biosystems	A37834	Thermal Cyclor
Miseq	Illumina	SY-410-1003	Sequencer
Miseq v2 300 cycle reagent kit	Illumina	MS-102-2002	300-cycle cartridge/sequencing reagents
Nextera XT DNA Library Prep kit	Illumina	FC-131-1024	Library preparation kit
Nextera XT Kit v2 Set A	Illumina	20027215	Indexes
Nunc 96-well polypropylene DeepWell Storage plates	Thermo Fisher Scientific	260251	deep well 96-well plates

Penicillin-Streptomycin Solution (100X)	Calsson Labs	PSL02-6X100ML	Antibiotics for cell culture
Phosphate Buffered Saline (PBS)	Bio Basic	PD8117	PBS
px330-CD4	Addgen	136938	SgRNA/CAS9 plasmids targeting 5'-GGCGTATCTGTGTGAGGACT
QIAxcel Advanced System	Qiagen	9001941	capillary electrophoresis machine
QIAxcel DNA screening kit	Qiagen	929004	DNA buffer/ capillary electrophoresis tubes
Qubit 1x ds HS Assay Kit	ThermoFisher Scientific	Q23851	Fluorometer reagents/1x dsDNA solution
Qubit 4 Fluorometer	ThermoFisher Scientific	Q33238	Fluorometer
Qubit Assay Tubes	Thermo Fisher Scientific	Q32856	Fluorometer assay tubes
RIPA Lysis Buffer	VWR	VWRVN653-100ML	Lysis buffer for protein extraction
Trypsin-EDTA (0.05%), phenol red	ThermoFisher Scientific	25300054	Trypsin
Vortex-Genie 2	Scientific industries	SI-0236	Vortex
Xfect Transfection Reagent	Takara Bio	631318	Transfection reagent
genomic data analysis software	QIAGEN	CLC Workbench v21.0.	Data analysis software