

Materials List for:

Looking for Driver Pathways of Acquired Resistance to Targeted Therapy: Drug Resistant Subclone Generation and Sensitivity Restoring by Gene Knock-down

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Materials

Name	Company	Catalog Number	Comments
Trizol Reagent	Invitrogen	15596026	TRizol Reagent is a reagent for isolating high-quality total RNA or simultaneously isolating RNA, DNA, and protein from a variety of biological samples
ISCRIP T CDNA SYNTHESIS KIT	Bio-Rad	1708891	The iScript cDNA synthesis kit is a sensitive and easy-to-use first-strand cDNA synthesis kit for gene expression analysis using real-time qPCR.
TaqMan gene expression assay	Life Technologies	4331182	Applied Biosystems TaqMan Gene Expression Assays consist of a pair of unlabeled PCR primers and a TaqMan probe with an Applied Biosystems FAM or VIC dye label on the 5' end and minor groove binder (MGB) and nonfluorescent quencher (NFQ) on the 3' end.
M-PER Mammalian Protein Extraction Reagent	Thermo Scientific	78501	Thermo Scientific M-PER Mammalian Protein Extraction Reagent is designed to provide highly efficient total soluble protein extraction from cultured mammalian cells.
Halt Protease and Phosphatase Inhibitor Cocktail (100X)	Thermo Scientific	78440	Thermo Scientific Halt Protease and Phosphatase Inhibitor Cocktail (100X) provides the convenience of a single solution with full protein sample protection for cell and tissue lysates.
Pierce BCA Protein Assay Kit	Thermo Scientific	23225	The Thermo Scientific Pierce BCA Protein Assay Kit is a two-component, high-precision, detergent-compatible assay reagent set to measure (A562nm) total protein concentration compared to a protein standard.
4x Laemmli Sample Buffer	Bio-Rad	1610747	Use 4x Laemmli Sample Buffer for preparation of samples for SDS PAGE. For reduction of samples, add a reducing agent such as 2-mercaptoethanol to the buffer prior to mixing with the sample.
4–20% Mini-PROTEAN TGX Precast Protein Gels	Bio-Rad	456-1094	Long-life TGX (Tris-Glycine eXtended) Gels have a novel

			formulation and can be used for both standard denaturing protein separations as well as native electrophoresis.
Precision Plus Protein WesternC Blotting Standards	Bio-Rad	1610376	Precision Plus Protein Prestained Standards are available in Dual Color, All Blue, Kaleidoscope, and Dual Xtra formats. All four have the same gel migration patterns, with 3 high-intensity reference bands (25, 50, and 75 kD).
10x Tris/Glycine/SDS	Bio-Rad	1610732	10x Tris/glycine/SDS is a premixed running buffer for separating protein samples by SDS-PAGE.
Trans-Blot Turbo Mini PVDF Transfer Packs	Bio-Rad	1704156	Trans-Blot Turbo Mini PVDF Transfer Packs for fast, efficient transfer of proteins from mini gels using the Trans-Blot Turbo Transfer System. Each vacuum sealed, ready-to-use transfer pack contains two buffer-saturated ion reservoir stacks and a prewetted PVDF membrane.
Precision Protein StrepTactin-HRP Conjugate	Bio-Rad	1610381	StrepTactin-Horseradish Peroxidase (HRP) Conjugate for chemiluminescent or colorimetric detection of Precision Plus Protein Unstained Protein Standards or Precision Plus Protein WesternC Protein Standards on western blots.
Immun-Star WesternC solution	Bio-Rad	5572	Immun-Star WesternC solution, a method of protein detection , detects mid-femtogram amounts of protein.
Universal Negative Control	Invitrogen	12935300	Negative Control siRNA has no significant sequence similarity to mouse, rat, or human gene sequences. The control has also been tested in cell-based screens and proven to have no significant effect on cell proliferation, viability, or morphology.
opti-MEM Glutamax Medium	Thermo Fisher Scientific	51985026	Opti-MEM Medium is an improved Minimal Essential Medium (MEM) that allows for a reduction of Fetal Bovine Serum supplementation by at least 50% with no change in growth rate or morphology.
Silencer Select Pre-Designed & Validated siRNA	Ambion	4390824	RNA interference (RNAi) is the best way to effectively knock down gene expression to study protein function in a wide range of cell types.
Lipofectamine RNAiMAX Transfection Reagent	Invitrogen	13778075	Lipofectamine RNAiMAX Transfection Reagent offers an advanced, efficient solution for siRNA delivery. No other siRNA specific transfection reagent provides such easy and efficient siRNA delivery in a wide variety of cell lines including common cell types, stem cells and primary cells, as well as traditionally hard-to-transfect cell types.

Mouse anti-IQGAP1	Invitrogen	33-8900	working concentration: 1:400 in 5% milk solution
goat anti-mouse IgG-HRP: sc-2005	Santa Cruz	sc-2005	working concentration: 1:10000 in 5% milk solution
PMSF	Sigma Aldrich	P 7626	this is an inhibitor of serine proteases and acetylcholinesterase
Thermocycler for RT-PCR	MJ Research	MJ Research PTC-200 Thermal Cycler	it allows temperature homogeneity and a ramping speed of up to 3°C/sec. The protocol can be performed also with other thermalcyclers
Real Time RT-PCR instrument	Applied Biosystems	7500 RT-PCR system	This is a five-color platform that uses fluorescence-based polymerase chain reaction (PCR) reagents to provide a relative quantification using comparative C _T assay type. The protocol can be performed also with other thermalcyclers
Microvolume Spectrophotometers	Thermo Scientific	Nanodrop	It provides an accurate and fast acid nucleid measurement using little volume of sample
Blotting system	Bio-Rad	Trans-Blot Turbo system	It perfoms a semy-dry transfer in a few minutes
Image acquisition system and gel documentation	Bio-Rad	Chemidoc image system	It is easy to use for chemiluminescent detection