

Materials List for:

Oncogenic Gene Fusion Detection Using Anchored Multiplex Polymerase Chain Reaction Followed by Next Generation Sequencing

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Materials

Name	Company	Catalog Number	Comments
10 mM Tris HCl pH 8.0	IDT	11-05-01-13	Used for TNA dilution
1M Tris pH 7.0	Thermo Fisher	AM9850G	Used in library pooling
25 mL Reagent Reservoir with divider	USA Scientific	9173-2000	For use with multi-channel pipettors and large reagent volumes
96-well TemPlate Semi-Skirt 0.1mL PCR plate-natural	USA Scientific	1402-9700	Plate used for thermocycler steps
Agencourt AMPure XP Beads	Beckman Coulter	A63881	Used in purification after several assay steps
Agencourt Formapure Kit	Beckman Coulter	A33343	Used in TNA extraction
Archer FusionPlex Solid Tumor kit	ArcherDX	AB0005	This kit contains most of the reagents necessary to perform library preparation for Illumina sequencing (kits for Ion Torrent sequencing are also available)
Cold block, 96-well	Light Labs	A7079	Used for keeping samples chilled at various steps
Ethanol	Decon Labs	DSP-MD.43	Used for bead washes
Library Quantification for Illumina Internal Control Standard	Kapa Biosystems	KK4906	Used for library quantitation
Library Quantification Primers and ROX Low qPCR mix	Kapa Biosystems	KK4973	Used for library quantitation
Library Quantification Standards	Kapa Biosystems	KK4903	Used for library quantitation
Magnet Plate, 96-well (N38 grade)	Alpaqua	A32782	Used in bead purification steps
MBC Adapters Set B	ArcherDX	AK0016-48	Adapters that contain sample-specific indexes to enable multiplex sequencing
Micro Centrifuge	USA Scientific	2641-0016	Used for spinning down PCR tubes
MicroAmp EnduraPlate Optical 96 well Plate	Thermo-Fisher	4483485	Used for Pre-Seq QCLibrary quantitation
Microamp Optical Film Compression Pad	Applied Biosystems	4312639	Used for library quantitation
Mini Plate Spinner	Labnet	MPS-1000	Used for collecting liquid at bottom of plate wells
MiSeq Reagent Kit v3 (600 cycle)	Illumina	MS-102-3003	Contains components necessary for a MiSeq sequencing run
MiSeqDx System	Illumina		NGS Sequencing Instrument
Model 9700 Thermocycler	Applied Biosystems		Used for several steps during assay
nuclease free water	Ambion	9938	Used as general diluent

Optical ABI 96-well PCR plate covers	Thermo-Fisher	4311971	Used for Pre-Seq QClibrary quantitation
PCR Workstation Model 600	Air Clean Systems	BZ10119636	Wet-bench assay steps performed in this 'dead air box'
Proteinase K	Qiagen	1019499	Used in TNA extraction
QuantStudio 5	Applied Biosystems	LSA28139	qPCR instrument used for PreSeq and library quantitation
Qubit RNA HS Assay Kit	Life Technologies	Q32855	Use for determining RNA concentration in TNA samples
RNase Away	Fisher	12-402-178	Used for general RNase decontamination of work areas
Seraseq FFPE Tumor Fusion RNA Reference Material v2	SeraCare	0710-0129	Used as the assay positive control
Sodium Hydroxide	Fisher	BP359-212	Used in clean-up steps and for sequencing setup
SYBR Green Supermix	Bio Rad	172-5120	Component of PreSeq QC Assay
TempAssure PCR 8-tube Strips	USA Scientific	1402-2700	Used for reagent and sample mixing etc.
Template RT PCR film	USA Scientific	2921-7800	Used for covering 96-well plates
U-Bottom 96-well Microplate	LSP	MP8117-R	Used during bead purification