

Materials List for:

CARIP-Seq and ChIP-Seq: Methods to Identify Chromatin-Associated RNAs and Protein-DNA Interactions in Embryonic Stem Cells

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Materials

Name	Company	Catalog Number	Comments
Mouse leukemia inhibitory factor (ESGRO LIF)	EMD Millipore		10 ⁶ or 10 ⁷ units
GSK3β inhibitor CHIR99021 (GSK3i)	Stemgent		Solvent: DMSO 10mM
MEK inhibitor PD0325901 (MEKi)	Stemgent		Solvent: DMSO 10mM
Dulbecco's Modified Eagle Medium (DMEM), high glucose	Invitrogen	11965092	
PBS (phosphate buffered saline)	Invitrogen	10010031	
Trypsin-EDTA (0.25%), phenol red	Gibco	25200056	
Penicillin-Streptomycin (10,000 U/ mL)	Gibco	15140122	
2-Mercaptoethanol (50 mM)	Gibco	31350010	
MEM Non-Essential Amino Acids Solution (100X)	Gibco	11140076	
EmbryoMax ES Cell Qualified Fetal Bovine Serum, 500 ml	EMD Millipore	ES-009-B	
EmbryoMax 0.1% Gelatin Solution	EMD Millipore	ES-006-B	
Glycine	Sigma	G7126-500G	1.25 M stock concentration in water
Formaldehyde solution	Sigma	F8775-500ML	
TE (Tris EDTA) pH 8.0 1X	Quality Biological	351-011-131	
Phenylmethanesulfonyl fluoride (PMSF) solution	Sigma	93482-250ML-F	
cOmplete Protease Inhibitor Cocktail	Roche	11697498001	
Sodium dodecyl sulfate solution (20%)	Quality Biological	A611-0837-10	
Q125 sonifier	Qsonica	4422	
Triton X-100 solution	Sigma	93443-100ML	
Sodium deoxycholate	Sigma	30970	
NaCl	Sigma	S7653	
Dynabeads Protein G for Immunoprecipitation	Invitrogen	10004D	
Dynabeads Protein A for Immunoprecipitation	Invitrogen	10002D	
Dynabeads Protein A/Protein G and Magnet Starter Pack	Invitrogen	10015D	
Lithium chloride	Sigma	L4408	

IGEPAL CA-630	Sigma	I8896	
RNeasy Mini Kit	Qiagen	74104	
Dynabeads mRNA Purification Kit (for mRNA purification from total RNA preps)	Invitrogen	61006	
SuperScript Double-Stranded cDNA Synthesis Kit	Invitrogen	11917010	
QIAquick PCR Purification Kit	Qiagen	28104	
End-It DNA End-Repair Kit	Lucigen	ER81050	
Klenow Fragment (3'→5' exo-)	NEB	M0212L	
dATP (10 mM)	Invitrogen	18252015	
T4 DNA ligase	NEB	M0202L	
TrackIt 1 Kb Plus DNA Ladder	Invitrogen	10488085	
E-gel EX agarose gels, 2%	Invitrogen	G402002	
Phusion high-fidelity 2X master mix with HF buffer	Thermo Fisher	F531LPM	
ChIPAb+ Trimethyl-Histone H3 (Lys4) - ChIP Validated Antibody	EMD Millipore	17-614	
Anti-Histone H3 (di methyl K4) antibody [Y47] - ChIP Grade (ab32356)	Abcam	ab32356	
Corning Costar Flat Bottom Cell Culture Plates (6-well)	Fisher	720083	
Falcon Standard Tissue Culture Dishes (10cm)	Fisher	08772E	
Bioruptor pico	Diagenode	B01010001	
Qubit Fluorometer 2.0	Thermo Fisher		
Qubit dsDNA HS Assay Kit	Thermo Fisher	Q32851	
MinElute Reaction Cleanup Kit	Qiagen	28204	
MinElute Gel Extraction Kit	Qiagen	28604	
Anti-Histone H4 (tri methyl K20) antibody - ChIP Grade (ab9053)	Abcam	ab9053	
Labquake rotator	Thermo Fisher	400110Q	
Illumina HiSeq platform	Illumina		
TURBO DNase	Invitrogen	AM2238	