Materials List for:
Chromatin Immunoprecipitation Assay Using Micrococcal Nucleases in Mammalian Cells

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### Materials

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Catalog Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 M EDTA (pH 8.0)</td>
<td>Thermo Scientific</td>
<td>AM9010</td>
<td></td>
</tr>
<tr>
<td>2 M KCl</td>
<td>Thermo Scientific</td>
<td>AM9010</td>
<td></td>
</tr>
<tr>
<td>2x iQ SYBR Green supermix</td>
<td>Bio-Rad</td>
<td>1706862</td>
<td></td>
</tr>
<tr>
<td>5 M NaCl</td>
<td>Thermo Scientific</td>
<td>AM9010</td>
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</tr>
<tr>
<td>50 bp DNA ladder</td>
<td>New England Biolabs</td>
<td>N3236S</td>
<td></td>
</tr>
<tr>
<td>Agarose</td>
<td>Research Product International</td>
<td>A20090</td>
<td></td>
</tr>
<tr>
<td>Branched octylphenoxy poly(ethyleneoxy)ethanol</td>
<td>Millipore Sigma</td>
<td>i8896</td>
<td>IGEPAL CA-630</td>
</tr>
<tr>
<td>ChIP-grade protein G magnetic beads</td>
<td>Cell signaling technology</td>
<td>9006S</td>
<td></td>
</tr>
<tr>
<td>Chromatin Immunoprecipitation</td>
<td>Millipore Sigma</td>
<td>20-153</td>
<td>Buffer composition: 0.01% SDS, 1.1% Triton X-100, 1.2 mM EDTA, 16.7 mM Tris-HCl, pH 8.1, 167 mM NaCl.</td>
</tr>
<tr>
<td>(ChIP) Dilution Buffer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gel Loading Dye Purple (6x)</td>
<td>New England Biolabs</td>
<td>B7024S</td>
<td></td>
</tr>
<tr>
<td>Glycine</td>
<td>Bio-Rad</td>
<td>161-0724</td>
<td>Electrophoresis grade</td>
</tr>
<tr>
<td>Glycogen</td>
<td>Millipore Sigma</td>
<td>G1767</td>
<td>19-22 mg/mL</td>
</tr>
<tr>
<td>Halt Protease and Phosphatase</td>
<td>Thermo Scientific</td>
<td>78445</td>
<td></td>
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<tr>
<td>Inhibitor Cocktail, EDTA-free (100x)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>High Salt Immune Complex Wash Buffer</td>
<td>Millipore Sigma</td>
<td>20-155</td>
<td>Buffer composition: 0.1% SDS, 1% Triton X-100, 2 mM EDTA, 20 mM Tris-HCl, pH 8.1, 500 mM NaCl.</td>
</tr>
<tr>
<td>Histone H3K4me3 antibody (pAb)</td>
<td>Active Motif</td>
<td>39915</td>
<td></td>
</tr>
<tr>
<td>LICI Immune Complex Wash Buffer</td>
<td>Millipore Sigma</td>
<td>20-156</td>
<td>Buffer composition: 0.25 M LiCl, 1% IGEPAL CA630, 1% deoxycholic acid (sodium salt), 1 mM EDTA, 10 mM Tris, pH 8.1.</td>
</tr>
<tr>
<td>Low Salt Immune Complex Wash Buffer</td>
<td>Millipore Sigma</td>
<td>20-154</td>
<td>Buffer composition: 0.1% SDS, 1% Triton X-100, 2 mM EDTA, 20 mM Tris-HCl, pH 8.1, 150 mM NaCl.</td>
</tr>
<tr>
<td>Magna GrlP Rack (8 well)</td>
<td>Millipore Sigma</td>
<td>20-400</td>
<td>Any kind of magnetic separation stands that are compatible with a 1.5 mL tube is fine.</td>
</tr>
<tr>
<td>Micrococcal nuclease</td>
<td>New England Biolabs</td>
<td>M0247S</td>
<td>comes with 10x buffer (500 mM Tris-HCl, 50 mM CaCl₂, pH 7.9 at 25 °C) and 100x BSA (10 mg/mL)</td>
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<tr>
<td>NaHCO₃</td>
<td>JT Baker</td>
<td>3506-01</td>
<td></td>
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<tr>
<td>Normal rabbit IgG</td>
<td>Millipore Sigma</td>
<td>12-370</td>
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<tr>
<td>PIPES</td>
<td>Millipore Sigma</td>
<td>P6757</td>
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<tr>
<td>Proteinase K</td>
<td>Millipore Sigma</td>
<td>3115887001</td>
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</tr>
<tr>
<td>Item</td>
<td>Supplier</td>
<td>Code</td>
<td>Notes</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------------------------</td>
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<td>--------------------------------------------</td>
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<tr>
<td>Real-time PCR system</td>
<td>Bio-Rad</td>
<td>CFX96, C1000</td>
<td></td>
</tr>
<tr>
<td>RNA pol II CTD phospho Ser5 antibody</td>
<td>Active Motif</td>
<td>39749</td>
<td></td>
</tr>
<tr>
<td>SDS</td>
<td>Boehringer Mannheim</td>
<td>100155</td>
<td>Electrophoresis grade</td>
</tr>
<tr>
<td>sodium acetate</td>
<td>Millipore Sigma</td>
<td>S5636</td>
<td></td>
</tr>
<tr>
<td>Sonicator equipped with a microtip probe</td>
<td>QSONICA</td>
<td>Q700</td>
<td>Any kind of sonicators that are compatible with a 1.5 mL tube is fine.</td>
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<tr>
<td>UltraPure Phenol:Chloroform:Isoamyl Alcohol (25:24:1, v/v)</td>
<td>Thermo Scientific</td>
<td>15593031</td>
<td>pH 8.05</td>
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</tbody>
</table>