



**Trouble Shooting Guide for the  
PurElute™ GX DNA Gel Extraction & Cleanup Kit**

PROBLEM	POSSIBLE CAUSE	SUGGESTED SOLUTIONS
<b>Poor DNA yield</b>	Inappropriate DNA measurement	<ul style="list-style-type: none"> <li>Use agarose gel analysis along with standards of known concentration to determine DNA concentration.</li> <li>Make sure sample is thoroughly mixed.</li> </ul>
	Failure to solubilize agarose gel completely	<ul style="list-style-type: none"> <li>Increase time for incubation at 50-55 °C.</li> <li>Mix gel solubilization mixture periodically during incubation.</li> </ul>
	Insufficient elution	<ul style="list-style-type: none"> <li>Use 30 µl or more elution volume.</li> <li>Incubate for 1 minute after addition of elution buffer before elution by centrifugation.</li> </ul>
<b>Poor Performance in Downstream Applications</b>	Residual salt from GX Binding Buffer	<ul style="list-style-type: none"> <li>After DNA Capture, make sure there is no binding buffer in the spin column and the membrane is not wet. If you see liquid; remove the droplet with pipette, repeat centrifugation or vacuum if necessary.</li> <li>Repeat Column Wash once if necessary.</li> </ul>
	Residual ethanol from GX Wash Buffer	<ul style="list-style-type: none"> <li>Make sure correct centrifugation speed and duration are used.</li> <li>Make sure flow through of GX Wash Buffer is discarded.</li> </ul>
	Impurities from agarose gel	<ul style="list-style-type: none"> <li>Increase time for incubation at 50-55 °C to be sure agarose gel is solubilized completely.</li> <li>Mix gel solubilization mixture periodically during incubation.</li> <li>Use fresh running buffer and clean gel box for gel electrophoresis.</li> </ul>
<b>Purified sample shows two bands in gel analysis</b>	Denaturation of DNA in water or very low concentration buffer	<ul style="list-style-type: none"> <li>Elute with elution buffer provided.</li> <li>Add 10 mM NaCl into elution buffer.</li> <li>Add 10 mM TrisCl, pH 8 and 10 mM NaCl (final concentration) into denatured sample to re-anneal DNA.</li> </ul>

**For additional troubleshooting assistance, please contact Edge BioSystems at:**

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