

Troubleshooting Guide

Problem	Possible Reason	Solution
Low recovery of DNA fragment	Volume of DNA solution is larger than 100 µl.	Aliquot the sample into two or more columns. If DNA to be cleaned up is relatively diluted, more than 100 µl solution can be used per column. Add 5 times PX Buffer for each 1 µl extra DNA solution (e.g. add 600 µl PX Buffer to 120 µl DNA solution).
	Ineffective DNA elution	DNA elution is poor at acidic conditions. Make sure that water or buffer is at a pH between 7.0 and 8.5.
	Size of DNA product is more than 5-kb.	Use elution solution preheated to 60°C.
	Eluted DNA contains salt residuals.	Wash the column twice with 0.5ml WS buffer.
Poor performance in downstream applications	Incomplete DNA elution	Complete DNA elution only happens when elution solution is in full contact with membrane. Make sure that at least 15 µl of solution is dispensed onto the center of the membrane and completely absorbed before elution.
Poor OD₂₆₀/OD₂₈₀ ratio	Use of acidic H₂O for dilution of eluted DNA.	Make sure pH of H ₂ O is at a value of 7.0-8.5.