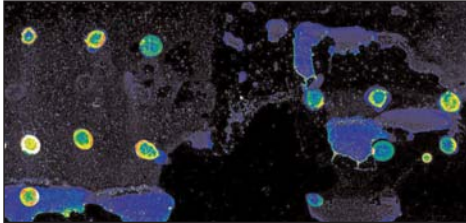
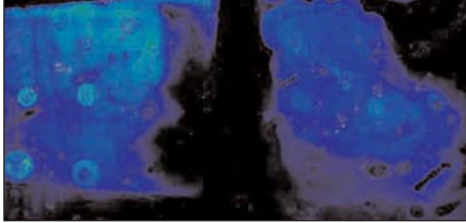
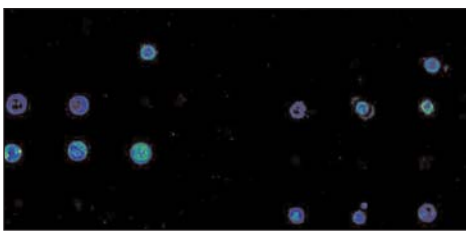
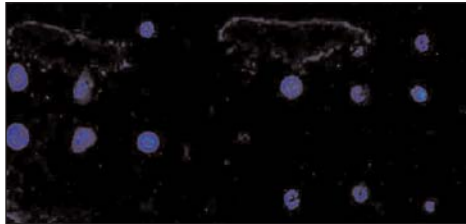
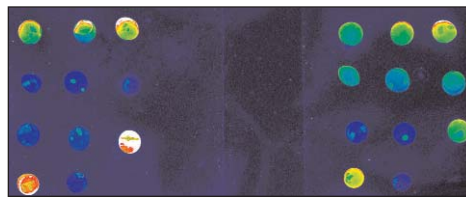


# DNA CHIP TROUBLESHOOTING GUIDE

Problem	Possible Cause	Suggestions	Image Sample
Background signal	Insufficient washing	Shake tube more vigorously during post-hybridization washes	
Very high background signal	Coverslip dried to slide during hybridization	<ul style="list-style-type: none"> <li>• Reduce hybridization time</li> <li>• Increase ambient humidity</li> <li>• Be sure volume of target plus hybridization buffer is not less than 20 <math>\mu</math>l</li> </ul>	
Spots appear as rings (donuts)	Probe DNA dried too fast	Let printed slides air dry without vigorous airflow.	
Weak signal	Fluorescent tag on target DNA has photo-bleached	<ul style="list-style-type: none"> <li>• Keep slide out of light as much as possible during and after hybridization</li> <li>• Keep target DNA on ice until hybridization reaction</li> </ul>	
Signal too high (too many spots give signal)	Probe printing error <b>OR</b> Scanning laser power too high	<ul style="list-style-type: none"> <li>• Be sure probe DNA is aliquoted correctly</li> <li>• Be sure probe DNA spot position is correctly recorded</li> <li>• Reduce scanner laser power (call FOTODYNE)</li> </ul>	
Irregular spots	Inconsistent pipetting of probe DNA onto slide	Practice pipetting.	