

# Capture Elusive Binding Data for Small Molecules and Proteins with Agile<sup>®</sup> R100



## Rethink Your Results

Agile R100 is an optics-free assay troubleshooting tool that puts validation of results in your personal control. With a direct measurement platform to study weak and tight binders or unstable proteins, now you can capture elusive binding data for all your compounds.

### Quickly validate weak binders

With an upper LOD in the mM range, you can capture weak binding interactions while avoiding the noise of labels.

### Measure tight binders that bottom out

Never be hampered by lack of sensitivity again with a dynamic range starting at 100 fM.

### Analyze unstable proteins such as GPCRs

Purifying enough sample to study membrane proteins can be painful. Agile R100 is designed to use just 0.5 ng of target so you can save your precious protein... and time.

### Check compounds in complex samples

With zero background noise from detergents and solvents, you can quickly verify compounds that aren't soluble in aqueous buffer.

### Verify SAR results with kinetic characterization

Gain affinity, on-rates and off-rates with the power of an optics-free, orthogonal sensing mechanism in your control.

## Agile R100 System Specifications

Dynamic Range of Detection	100 fM – 10 mM
Molecule Size	10 Da – 200 kDa
Sample Volume	10 – 50 $\mu$ L
Target Material	0.5 ng – 500 ng
Temperature Range	-20°C to 100°C
Sensing Time	2 minutes to 8+ hours
Dimensions	9" x 3"
Weight	2 lbs.

## Choose the Agile R100 Biosensor That Meets Your Needs

Biosensor	Chip Surface	Use	Considerations
NTA	NTA-functionalized graphene surface	For immobilization of his-tagged targets	<ul style="list-style-type: none"> <li>Enables control of target orientation</li> <li>Standard target release protocol for biosensor reuse</li> </ul>
NHS	Amine-reactive graphene surface	For target immobilization via free amine groups	<ul style="list-style-type: none"> <li>Faster immobilization protocol than COOH</li> <li>Covalent linkage of target</li> </ul>
SCOOH	High-density amine-reactive hydrophilic surface	For target immobilization via free amine groups. Designed to avoid saturation during high-concentration measurements.	<ul style="list-style-type: none"> <li>Uses EDC/sNHS</li> <li>Covalent linkage of target</li> <li>Decreases nonspecific binding from hydrophobic analytes</li> <li>25x the binding capacity of COOH chips</li> </ul>
COOH	Amine-reactive graphene surface	For target immobilization via free amine groups	<ul style="list-style-type: none"> <li>Uses EDC/sNHS</li> <li>Covalent linkage of target</li> </ul>
NH2	Carboxyl-reactive graphene surface	For target immobilization via free carboxyl groups	<ul style="list-style-type: none"> <li>Uses EDC/sNHS</li> <li>Covalent linkage of target</li> </ul>
FLEX	Uniform hydrophobic graphene surface	For customizable immobilization and experiment design	<ul style="list-style-type: none"> <li>Study membrane fractions and lipid monolayers</li> <li>Non-covalent linkage of target</li> </ul>

## Request a Trial

We're here to help you achieve the binding data you need when you need it. Contact us to learn more!

### Trials and Order Requests

844.894.7729; [sales@nanomedicaldiagnostics.com](mailto:sales@nanomedicaldiagnostics.com)  
[www.nanomedicaldiagnostics.com/request-trial](http://www.nanomedicaldiagnostics.com/request-trial)

### Explore

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