



iPLEX® PGx 74 Panel

Targeted Detection of Key Pharmacogenetic Markers

The iPLEX® PGx 74 Panel is a set of pre-designed assays that target the most relevant variants in 20 principal genes implicated in drug metabolism pathways. Combined with the accuracy and flexibility of the MassARRAY® System, identifying key biomarkers in pharmacogenetics is now easier and more cost effective than ever.

INTRODUCTION

Recent research has linked a number of genes, including *CYP2C19*, *CYP2C9*, *CYP2D6*, and *VKORC1*, with an individual's drug response.¹⁻⁴ Single nucleotide polymorphisms (SNP) and copy number variations (CNVs) in these genes have been shown to influence the rate of drug metabolism.⁵⁻⁷ An extended panel of genes may help to guide clinical research for therapeutic treatment and response.⁸⁻⁹

- ✓ Obtain relevant data for 69 SNPs/INDELS in 20 genes, plus 5 CNVs in *CYP2D6*.
- ✓ Use flexible throughput formats to accommodate varying sample throughput.
- ✓ Get robust data reporting with interactive visualization for results management.

GENES ANALYZED WITH iPLEX® PGx 74 PANEL

<i>ABCB1</i>	<i>DRD2</i>
<i>APOE</i>	<i>F2</i>
<i>COMT</i>	<i>F5</i>
<i>CYP1A2</i>	<i>GLP1R</i>
<i>CYP2B6</i>	<i>MTHFR</i>
<i>CYP2C19</i>	<i>OPRM1</i>
<i>CYP2C9</i>	<i>PNPLA5</i>
<i>CYP2D6</i>	<i>SLCO1B1</i>
<i>CYP3A4</i>	<i>SULT4A1</i>
<i>CYP3A5</i>	<i>VKORC1</i>

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Agena Bioscience, Inc.
4755 Eastgate Mall
San Diego, CA 92121
Phone: +1.858.882.2800

Order Desk: +1.858.202.9301
Order Desk Fax: +1.858.202.9220
orderdesk@AgenaBio.com
Web: agenabioscience.com

US: +1.877.4.GENOME
EU: +49.40.899676.0
AP: +61.7.3088.1600
CN: +86.21.6427.0566 51-20105R1.0 0317

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WORKFLOW

Each sample is subjected to targeted PCR amplification requiring as little as 10 ng genomic DNA for each multiplex, followed by primer extension with the iPLEX PGx 74 reagents. The extension products are dispensed onto a SpectroCHIP® Array and detected via mass spectrometry using the MassARRAY System. After the sample run, an automated software report provides diplotype, haplotype, and CNV calls in a single combined report. The report identifies CNV assays and calculates a relative copy number of 0, 1, 2, 3, or >4 copies with an associated confidence score.

THROUGHPUT

The iPLEX PGx 74 Panel contains multiplexed assays in 3 wells and can be run in 96-well format (32 samples per plate) or 384-well format (128 samples per plate), providing flexibility in sample throughput and batching requirements.

ORDERING INFORMATION

Order the iPLEX PGx 74 Panel and a complete iPLEX Pro Reagent Set for use on your MassARRAY System.

INTERESTED IN LEARNING MORE?

If you have questions about Agena Bioscience's products or services, or would like to place an order, please contact your local sales representative.

REFERENCES

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