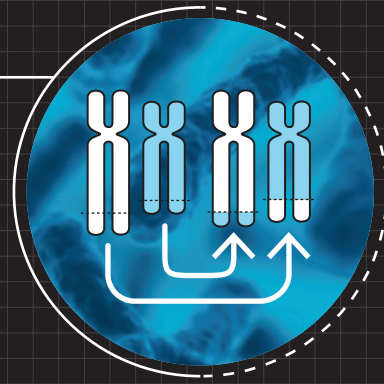


THE SCIENCE OF TUMOR BIOLOGY

LungFUSION™ Panel v1.0

Assays by Agena






Rapid screening of key translocations in lung cancer

MassARRAY® System



Screen for *ALK*, *RET*, and *ROS1* translocations in non-small cell lung cancer tumors.

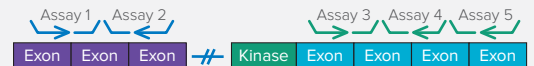
Agena Bioscience's LungFUSION™ Panel v1.0 offers a rapid screening method for detecting an oncogenic fusion partner in *ALK*, *RET*, or *ROS1* genes. Fusion partners in any of these genes have been correlated with targeted therapies for the treatment of lung cancer. The research panel, for use on the MassARRAY® System, offers:

-  Minimal sample requirements with only 10 ng cDNA template in a single well assay.
-  An internal *GAPDH* standard to assess RNA quality and genomic DNA contamination.
-  Built-in *EML4* controls to determine endogenous expression of wild-type lung tissue.

Assays by Agena also offers panels covering additional oncogenes and somatic mutations. See www.agenabio.com/oncology for more information.

ALK, RET & ROS1 FUSION GENE ASSAY SCHEMA

ALK - anaplastic lymphoma receptor tyrosine kinase



RET - ret proto-oncogene



ROS1 - c-ros oncogene 1, receptor tyrosine kinase



For Research Use Only. Not for use in diagnostic procedures.

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THE MASSARRAY WORKFLOW

RNA is extracted from each sample and subjected to reverse transcription followed by PCR amplification and primer extension. The extension products are dispensed onto a SpectroCHIP® Array and detected via MassARRAY MALDI-TOF mass spectrometry. After the sample run, an automated software report provides the translocation status for each sample, as well as a confidence score.

THROUGHPUT

The LungFUSION Panel v1.0 contains multiplexed assays in a single well. The panel can be run in 96-well format (96 samples per plate) or 384-well format (384 samples per plate).





ORDERING INFORMATION

Choose the best approach for you:

- Order the LungFUSION Panel v1.0 components and run on your own MassARRAY System.
- Send your samples to our Assays by Agena Custom Services Laboratory and have our experienced scientists run the panel for you.

Please contact Agena Bioscience for more information.

COMPONENTS FOR RUNNING THE LUNGFUSION PANEL v1.0

AMPLIFY		PCR Enzyme PCR Accessory Set LungFUSION v1.0 PCR Primers
EXTEND		iPLEX® Pro Reagent Set LungFUSION v1.0 Extend Primers
DETECT		SpectroCHIP Array and Clean Resin
ANALYZE		Typer Software

DATA ANALYSIS

The LungFUSION Panel report, supported by MassARRAY Typer software, provides a summary view and a sample report. The sample report (Figure 1) enables quick determination as to whether the sample has passed QC (RNA quality, DNA contamination) and whether there was a translocation observed.



Figure 1. LungFUSION Sample Report

The LungFUSION Panel Sample Report shows the sample (colored dot) against a box plot of baseline data, with the y-axis indicating the percentage of 3' expression. This example shows the presence of an ALK translocation.

The MassARRAY System, LungFUSION Panel, iPLEX Pro Reagents, SpectroCHIP Array, and Typer Software are For Research Use Only. Not for use in diagnostic procedures.

Agena Bioscience's patented nucleic acid analysis by mass spectrometry methods and products are protected under United States patent rights including but not limited to 5,869,242; 6,024,925; 6,238,871; 6,258,538; 6,300,076; 6,440,705; 6,500,621; 6,558,623; 6,569,385; 6,979,425; 6,994,969; 7,019,288; 7,025,933; 7,285,422; 7,332,275; 7,390,672; 7,419,787; 7,501,251; 7,888,127; 8,003,317; 8,034,567; 8,315,805; and 8,349,566 and patents pending including but not limited to US20050272070 and US20130017960, and foreign counterparts including but not limited to, EP0815261B1, EP173622B1, EP1727911B1, EP1546385B1, EP1332000B1, EP1613723B1, EP1660680B1, and EP2107129B1.

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