

NTRK1 NTRK2 NTRK3

Test for *NTRK* fusions with RNA-based OncoPrint next-generation sequencing assays

2-3 day turnaround time with as little as 10ng of RNA

The *NTRK* gene family encodes the TRK family of proteins—oncogenic drivers across multiple tumors in adults and children. *NTRK* fusions to unrelated genes result in overexpression and permanent activation of the TRK fusion proteins. Detection of *NTRK* fusions has become a primary need in precision oncology research. Scientific guidelines recommend RNA-based next-generation sequencing (NGS) assays as the preferred method for *NTRK* fusion detection.

OncoPrint™ NGS assays are not just a test. They come to you as part of a complete solution of end-to-end, clinical, research-grade workflows, which address specific NGS challenges for oncology researchers.

OncoPrint NGS assays provide everything you need from NGS assay technology for precision oncology testing:

- Complete workflow including bioinformatics optimized and validated to work together seamlessly
- Relevant biomarker coverage
- Low sample input requirement, enabling very small sample testing

OncoPrint assays for *NTRK1*, *NTRK2*, and *NTRK3* fusion testing

OncoPrint™ assays are RNA-based NGS assays that detect all *NTRK1*, *NTRK2*, and *NTRK3* gene fusions as quickly as 48 hours, from specimens with as little as 10ng of RNA. Each assay includes both a DNA and RNA panel, enabling detection of key cancer driver variations such as *EGFR*, *ALK*, *ROS1*, *BRAF*, *KRAS*, *RET*, *ERBB2* and many others.



OncoPrint assays	Number of genes	Validated sample types
OncoPrint™ Comprehensive Assay V3	161	FFPE tissue
OncoPrint™ Focus Assay	52	FFPE tissue
OncoPrint™ Childhood Cancer Research Assay	203	FFPE tissue, blood, and bone marrow

OncoPrint solutions for *NTRK* testing workflow

OncoPrint™ solutions are powered by the Ion GeneStudio S5 System. Together with the Ion Chef™ instrument for automated sample preparation, and a complete bioinformatics workflow that includes reporting by OncoPrint Reporter, OncoPrint solutions provide a truly integrated workflow, which can deliver results in 48 hours. Plus, our line of products is optimized and validated to work together seamlessly for a simplified NGS experience, provided by a single trusted partner.

Biomarker	Therapies	Guidelines	Trials
<i>NTRK1</i> fusion Non-small cell lung cancer (FFPE tissue)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>KRAS</i> G12D Colorectal cancer (Liquid biopsy)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
45.89 Mut/Mb Melanoma (Tumor mutational burden)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Accelerate successful implementation of OncoPrint assays in your lab with Analytical Validation Consulting services

Analytical Validation (AV) Consulting service provides technical project management of your lab's AV to help verify that the assay is tested for required parameters. We work with you to optimize and develop your validation workflow while providing data analysis support and template documentation as part of your end-to-end instrument and reagent investment. On average, we can help you complete the validation process 62–75% faster than on your own; and by supplying control samples, data analysis, and reporting, we can help you reduce costs up to 50% for your completed AV.

Project managed by AV consulting team in 10-15 weeks							
AV with Thermo Fisher Scientific	Project planning ~2 weeks	Instrument qualification and training ~3 weeks	Pre-validation planning ~1 weeks	Validation testing conducted by lab ~1-6 weeks	Analysis and validation report template ~1-2 weeks	AV consulting completion ~1 week	10-15 weeks
In-house AV	Internally managed AV typically completed in ~40 weeks						

Table 1: Analytical validation workflow completed 62-75% faster with AV consulting service.

For more information about OncoPrint NGS solutions, please visit oncoPrint.com

