

Sequencing reads required:

**1.5M**    **1M**    **1.5M**    **3M**    **3M**

|          |        |     |        |          |          |
|----------|--------|-----|--------|----------|----------|
| ABL1     |        |     |        |          | ABL1     |
| ABL2     |        |     |        |          | ABL2     |
| AKT1     |        |     | AKT1   |          | AKT1     |
| AKT2     |        |     |        |          | AKT2     |
| AKT3     |        |     |        | AKT3     | AKT3     |
| ALK      | ALK    | ALK | ALK    | ALK      | ALK      |
| ARHGAP26 |        |     |        | ARHGAP26 | ARHGAP26 |
| AXL      |        |     | AXL    | AXL      | AXL      |
| BRAF     |        |     | BRAF   | BRAF     | BRAF     |
| BRD3     |        |     |        | BRD3     | BRD3     |
| BRD4     |        |     |        | BRD4     | BRD4     |
| CALCA    |        |     | CALCA  |          |          |
| CAMTA1   | CAMTA1 |     |        |          |          |
| CCNB3    | CCNB3  |     |        |          |          |
| CCND1    |        |     | CCND1  |          |          |
| CIC      | CIC    |     |        |          |          |
| CRLF2    |        |     |        |          | CRLF2    |
| CSF1R    |        |     |        |          | CSF1R    |
| CTNNB1   |        |     | CTNNB1 |          |          |
| DDR2     |        |     | DDR2   |          |          |
| EGFR     |        |     | EGFR   | EGFR     | EGFR     |
| EPC1     | EPC1   |     |        |          |          |
| EPOR     |        |     |        |          | EPOR     |
| ERBB2    |        |     | ERBB2  |          | ERBB2    |
| ERBB4    |        |     |        |          | ERBB4    |
| ERG      |        |     |        | ERG      | ERG      |
| ESR1     |        |     |        | ESR1     | ESR1     |
| ESRRA    |        |     |        | ESRRA    | ESRRA    |
| ETV1     |        |     |        | ETV1     | ETV1     |
| ETV4     |        |     |        | ETV4     | ETV4     |
| ETV5     |        |     |        | ETV5     | ETV5     |
| ETV6     |        |     |        | ETV6     | ETV6     |
| EWSR1    | EWSR1  |     |        | EWSR1    | EWSR1    |
| FGFR1    |        |     | FGFR1  | FGFR1    | FGFR1    |
| FGFR2    |        |     | FGFR2  | FGFR2    | FGFR2    |
| FGFR3    |        |     | FGFR3  | FGFR3    | FGFR3    |
| FGR      |        |     |        | FGR      | FGR      |
| FOXO1    | FOXO1  |     |        |          |          |
| FUS      | FUS    |     |        |          |          |
| GLI1     | GLI1   |     |        |          |          |
| GNAS     |        |     | GNAS   |          |          |
| HMGA2    | HMGA2  |     |        |          |          |
| HRAS     |        |     | HRAS   |          |          |
| IDH1     |        |     | IDH1   |          |          |
| IDH2     |        |     | IDH2   |          |          |
| IL2RB    |        |     |        |          | IL2RB    |
| INSR     |        |     |        | INSR     | INSR     |
| JAK1     |        |     |        |          | JAK1     |
| JAK2     |        |     |        |          | JAK2     |
| JAK3     |        |     |        |          | JAK3     |
| JAZF1    | JAZF1  |     |        |          |          |

## ALK RET ROS1 v2

Essential 29-target assay detects gene-fusions and key resistance mutations in ALK, RET, and ROS1

## CTL - Thyroid/Lung

Focused 195-target assay identifies gene-fusions and SNVs implicated in thyroid and lung cancers, including MET and EGFR splicing

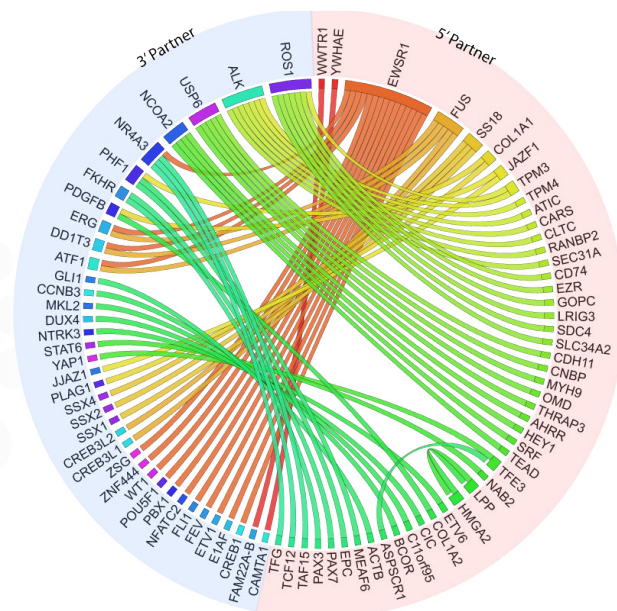
## Solid Tumor

Comprehensive 288-target assay uncovers gene-fusions in 53 genes associated with various carcinomas, including MET and EGFR splicing

## Oncology Research

Expansive 393-target assay reveals gene fusions and key resistance mutations in 75 cancer-related genes, including those observed in Ph-like ALL, with MET and EPOR splicing

|         |       |        |         |         |
|---------|-------|--------|---------|---------|
| KIT     |       |        |         | KIT     |
| KRAS    |       | KRAS   |         |         |
| KRT20   |       | KRT20  |         |         |
| KRT7    |       | KRT7   |         |         |
| MAML2   |       |        | MAML2   | MAML2   |
| MAP2K1  |       | MAP2K1 |         |         |
| MAST1   |       |        | MAST1   | MAST1   |
| MAST2   |       |        | MAST2   | MAST2   |
| MEAF6   | MEAF6 |        |         |         |
| MET     |       | MET    | MET     | MET     |
| MKL2    | MKL2  |        |         |         |
| MSMB    |       |        | MSMB    | MSMB    |
| MUSK    |       |        | MUSK    | MUSK    |
| MYB     |       |        | MYB     | MYB     |
| MYC     |       |        |         | MYC     |
| NCOA2   | NCOA2 |        |         |         |
| NOTCH1  |       |        | NOTCH1  | NOTCH1  |
| NOTCH2  |       |        | NOTCH2  | NOTCH2  |
| NRAS    |       | NRAS   |         |         |
| NRG1    |       | NRG1   | NRG1    | NRG1    |
| NTRK1   |       | NTRK1  | NTRK1   | NTRK1   |
| NTRK2   |       | NTRK2  | NTRK2   | NTRK2   |
| NTRK3   | NTRK3 |        | NTRK3   | NTRK3   |
| NUMBL   |       |        | NUMBL   | NUMBL   |
| NUTM1   |       |        | NUTM1   | NUTM1   |
| PDGFB   | PDGFB |        |         |         |
| PDGFRA  |       |        | PDGFRA  | PDGFRA  |
| PDGFRB  |       |        | PDGFRB  | PDGFRB  |
| PIK3CA  |       | PIK3CA | PIK3CA  | PIK3CA  |
| PKN1    |       |        | PKN1    | PKN1    |
| PLAG1   | PLAG1 |        |         |         |
| PPARG   |       | PPARG  | PPARG   | PPARG   |
| PRKCA   |       |        | PRKCA   | PRKCA   |
| PRKCB   |       |        | PRKCB   | PRKCB   |
| PTH     |       | PTH    |         |         |
| PTK2B   |       |        |         | PTK2B   |
| RAF1    |       | RAF1   | RAF1    | RAF1    |
| RARA    |       |        |         | RARA    |
| RELA    |       |        | RELA    | RELA    |
| RET     |       | RET    | RET     | RET     |
| ROS1    | ROS1  | ROS1   | ROS1    | ROS1    |
| RSPO2   |       |        | RSPO2   | RSPO2   |
| RSPO3   |       |        | RSPO3   | RSPO3   |
| SLC5A5  |       | SLC5A5 |         |         |
| SS18    | SS18  |        |         |         |
| STAT6   | STAT6 |        |         |         |
| SYK     |       |        |         | SYK     |
| TAF15   | TAF15 |        |         |         |
| TCF12   | TCF12 |        |         |         |
| TERT    |       |        | TERT    | TERT    |
| TFE3    | TFE3  |        | TFE3    | TFE3    |
| TFEB    |       |        | TFEB    | TFEB    |
| TFG     | TFG   |        |         |         |
| THADA   |       | THADA  | THADA   | THADA   |
| TMPRSS2 |       |        | TMPRSS2 | TMPRSS2 |
| TSLP    |       |        |         | TSLP    |
| TTF1    |       | TTF1   |         |         |
| TYK2    |       |        |         | TYK2    |
| USP6    | USP6  |        |         |         |
| YWHAE   | YWHAE |        |         |         |



## Sarcoma

Consolidated 148-target assay exposes known and novel fusions in 26 genes commonly associated with soft tissue cancers

ARCHER®

**SureShot™**

Fusion Controls

The Archer SureShot ALK, RET, ROS1 Positive Controls consist of 4 FFPE curls containing cell lines with physiologically relevant abundance of ALK, RET and ROS1 fusions, specifically:

- EML4-ALK variant 1
- ROS1-SL34A2
- RET-CCDC6

Each curl contains a defined mixture of 3 different ALK, RET, and ROS1 fusion-positive cell lines along with a wild-type parental strain.

SureShot Positive and Negative controls are suitable for use with all FusionPlex panels containing these genes.



Learn more at [archerdx.com/fusionplex](http://archerdx.com/fusionplex)