

## Targeted Gene Regions Interrogated by Lung Panel

Next-generation sequencing (NGS) is performed to test for the presence of a single nucleotide and/or copy number variants in these genes. When appropriate, reported alterations detected by NGS are confirmed by an independent reference method, such as multiplex ligation-dependent probe amplification (MLPA), polymerase chain reaction (PCR), and/or Sanger sequencing.

Genomic Build: GRCh37 (hg19)

| Gene  | RefSeq Transcript <sup>1</sup> | Targeted Regions <sup>2</sup> |
|-------|--------------------------------|-------------------------------|
| ALK   | NM_004304                      | 29445213 – 29445334           |
| ALK   | NM_004304                      | 29443589 – 29443707           |
| ALK   | NM_004304                      | 29432646 – 29432776           |
| BRAF  | NM_004333                      | 140453118 – 140453196         |
| EGFR  | NM_005228                      | 55211043 – 55211132           |
| EGFR  | NM_005228                      | 55221785 – 55221871           |
| EGFR  | NM_005228                      | 55232966 – 55233071           |
| EGFR  | NM_005228                      | 55241601 – 55241733           |
| EGFR  | NM_005228                      | 55242417 – 55242514           |
| EGFR  | NM_005228                      | 55248961 - 55249084           |
| EGFR  | NM_005228                      | 55249133 – 55249229           |
| EGFR  | NM_005228                      | 55259506 - 55259609           |
| ERBB2 | NM_004448                      | 37880161 – 37880289           |
| ERBB2 | NM_004448                      | 37880964 – 37881057           |
| ERBB2 | NM_004448                      | 37881334 – 37881460           |
| HRAS  | NM_005343                      | 534238 – 534313               |
| HRAS  | NM_005343                      | 533808 – 533918               |
| HRAS  | NM_005343                      | 533463 – 533565               |
| KRAS  | NM_004985                      | 25398257 – 25398312           |
| KRAS  | NM_004985                      | 25380233 – 25380304           |
| KRAS  | NM_004985                      | 25378559 – 25378660           |
| MET   | NM_001127500                   | 116411837 – 116411962         |
| MET   | NM_001127500                   | 116412026 – 116412089         |
| NRAS  | NM_002524                      | 115258729 – 115258774         |
| NRAS  | NM_002524                      | 115256521 – 115256585         |
| NRAS  | NM_002524                      | 115252194 – 115252297         |

<sup>1</sup> Reference transcript numbers may have been updated due to database re-versioning. Always refer to the final patient report for gene transcript information referenced at the time of testing.

<sup>2</sup> Default reportable range offset is +/- 2 base pairs around each targeted exon region. Exception: *MET* intron 13 and 14 expanded coverage.

To verify if a specific region/exon/variant is covered by this assay, contact a laboratory genetic counselor at 800-533-1710.