GTC Tumor-Specific Profiles

Solid Tumors

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| Colorectal: | | | | | | | | | |
| MSI | **TMB** | APC | ATM | BRAF | BRCA1 | BRCA2 | CTNNB1 | EGFR | EPCAM |
| ERBB2 | ERBB4 | FBXW7 | IDH1 | IDH2 | KIT | KMT2C | KMT2D | KRAS | MLH1 |
| MSH2 | MSH6 | NEB | NOTCH1 | NRAS | PIK3CA | PDGFRA | PMS2 | POLE | PTEN |
| RNF43 | SMAD4 | TP53 |  |  |  |  |  |  |  |

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| Thyroid: | | | | | | | | | |
| MSI | **TMB** | ALK | APC | ARID1A | ATM | BRAF | BRCA1 | BRCA2 | CDKN2A |
| CTNNB1 | EGFR | EPCAM | HRAS | IDH1 | IDH2 | KIT | KMT2C | KMT2D | KRAS |
| MEN1 | MET | MLH1 | MSH2 | MSH6 | NEB | NF1 | NOTCH1 | NOTCH2 | NRAS |
| PDGFRA | PIK3CA | PMS2 | PTEN | RB1 | RET | TERT | TP53 | TSHR |  |
| - Thyroid Add Fusion: | | | | | | | | | |
| ALK | ROS1 | RET | PAX8-PPARγ1 | | NTRK1 | NTRK2 | NTRK3 |  |  |

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| Ovary: | | | | | | | | | |
| MSI | **TMB** | APC | ARID1A | ATM | ATR | BRAF | BRCA1 | BRCA2 | CDK12 |
| CDKN2A | CHEK2 | CREBBP | CTNNB1 | EGFR | EPCAM | FAT1 | FAT4 | FBXW7 | IDH1 |
| IDH2 | KIT | KMT2C | KMT2D | KRAS | MET | MLH1 | MLL2 | MSH2 | MSH6 |
| MTOR | NF1 | NOTCH2 | NRAS | PDGFRA | PIK3CA | PMS2 | PPP2R1A | PTEN | PTPRT |
| RB1 | SMARCA4 | TP53 |  |  |  |  |  |  |  |

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| Lung: | | | | | | | | | |
| MSI | **TMB** | ALK | ARID1A | ATM | BAI3 | BRAF | BRCA1 | BRCA2 | CACNA1E |
| CDKN2A | EGFR | EPCAM | EPHA3 | EPHA5 | ERBB2 | ERBB4 | EYS | FAT1 | GRIN2A |
| HCN1 | HMCN1 | IDH1 | IDH2 | KIT | KMT2C | KMT2D | KRAS | LRRC7 | MET |
| MLH1 | MSH2 | MSH6 | NF1 | NFE2L2 | NRAS | NTRK3 | OBSCN | PDGFRA | PIK3CA |
| PIK3CG | PKHD1 | PKHD1L1 | PMS2 | PTEN | PTPRT | RB1 | SMARCA4 | STK11 | TP53 |
| - Lung Add Fusion: | | | | | | | | | |
| ALK | ROS1 | RET | NTRK1 | NTRK2 | NTRK3 |  |  |  |  |

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| Breast: | | | | | | | | | |
| MSI | **TMB** | AKT1 | APC | ATM | ATR | ATRX | BRAF | BRCA1 | BRCA2 |
| CDH1 | CDKN2A | EGFR | EPCAM | ERBB2 | ERBB3 | ERBB4 | ESR1 | IDH1 | IDH2 |
| KIT | KMT2A | KMT2C | KMT2D | KRAS | MAP2K4 | MAP3K1 | MLH1 | MSH2 | MSH6 |
| MTOR | NF1 | NOTCH1 | NOTCH2 | NRAS | PDGFRA | PIK3CA | PIK3R1 | PMS2 | PTEN |
| RB1 | SF3B1 | TP53 |  |  |  |  |  |  |  |

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| Bladder: | | | | | | | | | |
| MSI | **TMB** | APC | ARID1A | ATM | ATR | BRAF | BRCA1 | BRCA2 | CDKN1A |
| CDKN2A | CREBBP | EGFR | EP300 | EPCAM | ERBB2 | ERBB3 | ERCC2 | FBXW7 | FGFR3 |
| HRAS | IDH1 | IDH2 | KDM6A | KIT | KMT2A | KMT2C | KMT2D | KRAS | MLH1 |
| MLL2 | MSH2 | MSH6 | NF1 | NOTCH2 | NRAS | PDGFRA | PIK3CA | PMS2 | RB1 |
| SMARCA4 | STAG2 | TP53 | TSC1 | FGFR1 | FGFR2 | FGFR3 |  |  |  |
| - Bladder Add Fusion: | | | | | | | | | |
| FGFR(1-4) |  |  |  |  |  |  |  |  |  |

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| Prostate: | | | | | | | | | |
| MSI | **TMB** | APC | AR | ATM | BRAF | BRCA1 | BRCA2 | CDK12 | CTNNB1 |
| EGFR | EPCAM | HRAS | IDH1 | IDH2 | JAK1 | KIT | KMT2A | KMT2C | KMT2D |
| KRAS | MGA | MLH1 | MSH2 | MSH6 | NF1 | NRAS | PDGFRA | PIK3CA | PMS2 |
| PTEN | RB1 | SPOP | TP53 |  |  |  |  |  |  |

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| Melanoma: | | | | | | | | | |
| MSI | **TMB** | BRAF | BRCA1 | BRCA2 | CDKN2A | CTNNB1 | DCC | EGFR | EPCAM |
| EPHA7 | ERBB4 | HRAS | IDH1 | IDH2 | KIT | KMT2C | KMT2D | KRAS | MEN1 |
| MET | MLH1 | MSH2 | MSH6 | NEB | NF1 | NOTCH1 | NOTCH2 | NRAS | PDGFRA |
| PMS2 | PTEN | ROS1 | SPTA1 | TP53 |  |  |  |  |  |

Specimen Requirements:

-FFPE: 1 H&E slide and 6-8 unstained slides, 5-7 microns of tissue fixed with 10% NBF fixative. Please circle tumor for microdissection. Alternatively, the FFPE block can be sent for tumor circling and cutting at our laboratory.

Shipping:

Ship using cold pack. The cold pack should not directly contact specimen. Ship as soon as sample collected with overnight delivery.

Turn Around Time:

5 - 7 days