



Sample Requirement

| Sample Type | | Quantity Requirements | Quality Requirements | Transportation Conditions |
|------------------------------|----------|------------------------|---|--|
| Fresh Tissue | Surgery | ≥0.5cm ³ | ≥50% tumor content by area recommended (no less than 20%).Central area of tissue first. ≤10% necrotic content. | Room temperature |
| | Puncture | >2 needles,length >1cm | | |
| Paraffin Section | Surgery | ≥10 unstained slides | ≥50% tumor content by area recommended (no less than 20%).Central area of tissue first. ≤10% necrotic content.≤5μm section thickness, > 5*5mm section area. Preserved within 1 year. Provide at least 1 HE stained slide. | Room temperature |
| | Puncture | ≥15 unstained slides | | |
| Paraffin Block | | 1-2 blocks | ≥50% tumor content by area recommended (no less than 20%).Central area of tissue first. ≤10% necrotic content.Preserved within 1 year. Provide at least 1 HE stained slide. | Room temperature |
| Peripheral Blood | | 10ml | No serious coagulation,hemolysis | Cell-Free DNA BCT 6-37 °C (<72 hours) |
| Peripheral Blood(ctDNA) | | 3-5ml | No coagulation, hemolysis | EDTA Tube 2-8 °C Cold-Chain |
| Thoracic and Abdominal Fluid | | >10ml | 1.Store in a sterilized sealed bottle at 2-8'C. Mix if portioned 2.Centrifuge at 2000 rpm for 12 minutes. Discard supemat, antkeep cell precipitate about the size of a soybean. | Short distance: ice pack Long distance: dry ice |



Indication Patients Clinical Significance

| Applicable People | Clinical Significance |
|--|--|
| Newly Diagnosed Patients | Assist in Precision MedicationSelection |
| Post Operative Patients Requiring Drug Therapy | Assist in Comprehensive Post Operative Medication Selection/ Prognosis Assessment |
| Patients Experiencing Relapse, Drug Resistance, or Metastasis During Treatment | Identify Drug Resistance Mechanisms Adjust Treatment Plans, Personalize Medication Selection |
| Late-stage Patients After Failure of Multiline Therapy | Offer More Clinical Treatment Chance |

Z-Capture™ Pan-Cancer 120
Gene Detection Kit



Tumor Type
Solid Tumor



Sample Type
Tissue, Blood



Turn Around Time
1.5 natural days

| Product Features | | |
|---------------------|--|---------|
| Product Name | Z-Capture™ Pan-Cancer 120 Gene Detection Kit | |
| Sample Type | Fresh Tissue, FFPE | cfDNA |
| Input DNA | 50ng | 30ng |
| Numbers of Gene | 140 | |
| Types of Variants | SNV, Short InDel, CNV, MSI, Fusion | |
| Sequencing Platform | Illumina/MGI/Genemind | |
| Read Length | PE 150 | |
| Sequencing Depth | ≥1500X | ≥10000X |
| Raw Data | 2G | 10G |

1. Comprehensive guidance for targeted therapies

- Detect 140 cancer-relevant genes in one test which cover targeted drugs, toxicity and sensitivity of chemotherapy, immune signaling pathway and genetic susceptibility of tumors. Provide comprehensive insights to help guide informed, personalised treatment decisions
- Detect HRR-related core genes, assess patients' HRD status, and help inform the use of PARP inhibitors.

2. Reporting MSI and gene alterations predicting immunotherapy efficacy to help inform eligibility for PD-1/PD-L1 inhibitors

- Microsatellite instability assay (MSI)
Tumor patients with microsatellite instability are more likely to benefit from PD-1 ISA
- Mismatch repair (MMR)-related gene testing
Tumor patients with mismatch repair abnormalities (dMMR) can choose PD-1 ISA if standard therapy fails.

3. Accurate and high Sensitivity

ctDNA limit of detection (LoD) = 0.5% (30ng input) .
FFPE sample: LoD=2% for hotspots

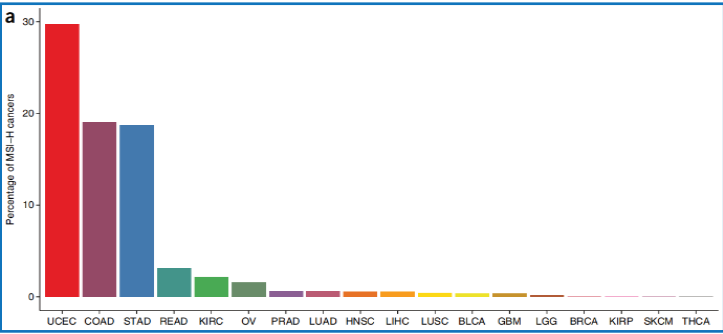
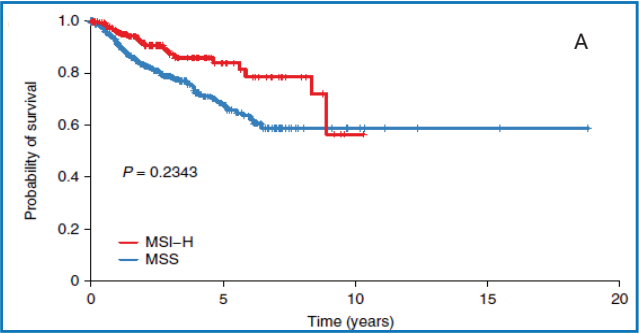


Gene List

| | | | | | | | | | |
|----------|--------|--------|-------|--------|--------|--------|--------|---------|--------|
| ABRAXAS1 | BMPR1A | CDKN2A | EMSY | GNA11 | KIT | MYC | PIK3CA | RB1 | SPOP |
| AKT1 | BRAF | CDKN2B | EPCAM | GNAQ | KRAS | NBN | PIK3R1 | RET | SRY |
| ALK | BRCA1 | CHEK1 | ERBB2 | GNAS | MAP2K1 | NF1 | PMS1 | RHOA | STK11 |
| AMER1 | BRCA2 | CHEK2 | ESR1 | GREM1 | MAP3K1 | NFE2L2 | PMS2 | ROS1 | TCF12 |
| APC | BRIP1 | CREBBP | FBXW7 | HDAC2 | MDM2 | NOTCH2 | POLE | RUNX1 | TERT |
| AR | CBFB | CSMD1 | FGF19 | HOXB13 | MDM4 | NRAS | PREX2 | SDHA | TGFBR2 |
| ARID1A | CBL | CSMD3 | FGF3 | HRAS | MED12 | NTRK1 | PTCH1 | SDHB | TPRSS2 |
| ARID2 | CCND1 | CTNNB1 | FGF4 | IDH1 | MET | NTRK2 | PTEN | SDHC | TP53 |
| ATM | CD274 | CYP2D6 | FGFR1 | IDH2 | MLH1 | NTRK3 | RAD50 | SDHD | TSC1 |
| ATRX | CDA | CYP4F3 | FGFR2 | JAK1 | MRE11 | PALB2 | RAD51B | SETD2 | TSC2 |
| B2M | CDH1 | DDR2 | FGFR3 | JAK2 | MSH2 | PBRM1 | RAD51C | SF3B1 | TTK |
| BAP1 | CDK12 | DPYD | FLT3 | KDR | MSH6 | PDCD1 | RAD51D | SMAD4 | UGT1A1 |
| BARD1 | CDK4 | EGFR | FOXA1 | KEAP1 | MTOR | PDGFRA | RAD54L | SMARCA4 | VEGFA |
| BCL2L11 | CDK6 | EIF1AX | GATA3 | KIF6 | MUTYH | PDGFRB | RAF1 | SOX2 | VHL |

Microsatellite Instability (MSI).
A Predictive Marker for
Immunotherapy in Various
Cancer Types

In May 2017,Keytruda was approved by the FDA as the first anticancer drug based on MSI-H/dMMR biomarkers to treat the patients with MSI-H or dMMR solid tumors, regardless of tumor type. The proportion of MSI-H in different cancer types (as shown in Figure B).



Patient survival aggregated for endometrial, stomach, colon, and rectal cancers, stratified by inferred MSI status (MSS n=864, MSI-H n=241).