

# MPB-Approved List of Assays

| Assay Name                                      | Assay Description   | Specimen Requirements   | For More Information  | Principal Investigator & Testing Site  |
|---|---|---|---|--|
| Tumor Microenvironment Panel                    | Assay provides a tumour immune score (TIS) as well as relative levels of expression of immune components and immune checkpoints based on RNA expression levels (nanoString-based, FFPE or frozen tissue).   | FFPE blocks or 10 x 10 $\mu$ m shavings in an Eppendorf tube  | <a href="#">Tumour Microenvironment Panel Webpage</a>                   | Dr. Cynthia Hawkins, The Hospital for Sick Children                          |
| Cell Signaling Pathways Panel                   | Assay determines relative level of activity of four main oncogenic pathways (RAS/MAPK, PI3K, JAK/STAT, Nf $\kappa$ B) based on RNA expression levels (nanoString-based, FFPE or frozen tissue).   | FFPE blocks or 10 x 10 $\mu$ m shavings in an Eppendorf tube  | <a href="#">Cell Signaling Pathways Panel Webpage</a>                   | Dr. Cynthia Hawkins, The Hospital for Sick Children                          |
| Liquid Biopsy Circulating Tumour DNA Sequencing | Fluid based DNA NGS assay (blood, CSF, pleural, peritoneal, etc.)<br>Lowpass Whole Genome Sequencing and Targeted Pan-Cancer Panel sequencing.  | 2-10 mL of the liquid biopsy sample   | <a href="#">Liquid Biopsy Circulating Tumour DNA Sequencing Webpage</a> | Dr. Cynthia Hawkins, The Hospital for Sick Children                          |
| Liquid Biopsy (Tempus xF+) Assay                | A non-invasive, liquid biopsy panel (xF gene panel) of 523 genes focused on oncogenic and resistance mutations in cell-free DNA (cfDNA). This test is provided as part of a research study called LIBERTY [LIquid Biopsy for rElapsed/RefracToRY Neuroblastoma] and informed consent from patient/family is required. | Peripheral blood sample will be collected once in Streck blood tubes. 2 tubes of 8.5 mL nominal fill volume per tube will be collected. | <a href="#">Link to Publication - Tempus Website</a>                    | Drs. Sarah Cohen-Gogo and Daniel Morgenstern, The Hospital for Sick Children |