# NCLN Assay Information

Table rows can be copied and pasted directly into the Biomarker table in the CTEP LOI template and generic protocol template.

Copy only the rows with the assays you intend to use in the study.

## NCLN Genomic Assays

*For more information on each assay, refer to the* [*NCLN website’s Genomic Assays page.*](https://ctep.cancer.gov/initiativesPrograms/etctn/ncln/MoCha/)

|  |  |  |
| --- | --- | --- |
| **Biomarker Name** | **Assay** | **Assay Laboratory, Lab PI, and Lab PI Email** |
| Whole Exome Sequencing (WES) | NGS | MoCha, Frederick National Laboratory for Cancer Research (FNLCR)  Chris Karlovich; chris.karlovich@nih.gov |
| RNAseq | NGS | MoCha, Frederick National Laboratory for Cancer Research (FNLCR)  Chris Karlovich; chris.karlovich@nih.gov |
| Oncomine Panel | Oncomine v3 | MoCha, Frederick National Laboratory for Cancer Research (FNLCR)  Chris Karlovich; chris.karlovich@nih.gov |
| Circulating Tumor DNA (ctDNA) | TSO500 | MoCha, Frederick National Laboratory for Cancer Research (FNLCR)  Chris Karlovich; chris.karlovich@nih.gov |

## NCLN Pharmacodynamic Assays

*For more information on each assay, refer to the* [*NCLN website’s PD Assays page.*](https://dctd.cancer.gov/ResearchResources/ResearchResources-biomarkers.htm)

1. **For Luminex assays:** in the second column (“Assay”), delete information for any panels that you do not intend to perform.

* For example, if you are proposing Apoptosis Panel 1 and 2, delete the text related to panel 3 before copy-pasting.
* If you are proposing multiple panels for an assay, indicate which panel is the top priority.

|  |  |  |
| --- | --- | --- |
| **Biomarker Name** | **Assay** | **Assay Laboratory, Lab PI, and Lab PI Email** |
| ɣH2AX, pNBS1 and pKAP1 IFA with βCATN segmentation | Multiplex Immunofluorescence Assay (mIFA) | NCLN PD Assay Laboratory at MD Anderson  Kate Ferry-Galow; [ferrygalowkv@mail.nih.gov](mailto:ferrygalowkv@mail.nih.gov) |
| pHH3, pY15-Cdk IFA with βCATN segmentation | Multiplex Immunofluorescence Assay (mIFA) | NCLN PD Assay Laboratory at MD Anderson  Kate Ferry-Galow; [ferrygalowkv@mail.nih.gov](mailto:ferrygalowkv@mail.nih.gov) |
| Apoptosis Multiplex Immunoassay, Luminex | Luminex,  Panel 1: BAK, BAX, Lamin-B, Smac dimer;  Panel 2: BIM, BAD, BAX-Bcl-2 heterodimer, Bcl-xL, Mcl-1;  Panel 3: BAK-Mcl-1 heterodimer, BAK-Bcl-xL heterodimer, Active Caspase 3 (cleaved), Survivin | National Clinical Target Validation Laboratory (NCTVL), Frederick National Laboratory for Cancer Research (FNLCR)  Kate Ferry-Galow; [ferrygalowkv@mail.nih.gov](mailto:ferrygalowkv@mail.nih.gov) |
| AKT Multiplex Immunoassay Panel 1-3\* | Luminex,  Panel 1: AKT1, AKT2, AKT3, rpS6;  Panel 2: pS473-AKT1, pS474-AKT2, pS472-AKT3, pS235-rpS6;  Panel 3: pT308-AKT1, pT309-AKT2, pT305-AKT3, pS240/244-rpS6 | National Clinical Target Validation Laboratory (NCTVL), Frederick National Laboratory for Cancer Research (FNLCR)  Kate Ferry-Galow; [ferrygalowkv@mail.nih.gov](mailto:ferrygalowkv@mail.nih.gov) |
| ERK/MEK Multiplex Immunoassay Panel 4-5\* | Luminex,  Panel 4: ERK1, ERK2, MEK1, MEK2;  Panel 5: pS218/S222-MEK1, pS222/S226-MEK2, pT202/Y204-ERK1, pT185/Y187-ERK2 | National Clinical Target Validation Laboratory (NCTVL), Frederick National Laboratory for Cancer Research (FNLCR) |