[**Mayo Clinic Brain Tumor Patient-Derived Xenograft (PDX) National Resource**](https://www.mayo.edu/research/labs/translational-neuro-oncology/mayo-clinic-brain-tumor-patient-derived-xenograft-national-resource/overview)

**PDX Tumor Extract Information**

**Updated Jan. 2, 2023**

**A few important notes:**

**Tumor whole cell lysates –**

* We no longer offer protein lysates. Lysates can be generated from fresh/frozen tumor.

**RNA –**

* RNA samples were extracted using the RNeasy kit (Qiagen, Cat# 74106) or the AllPrep DNA/RNA Mini Kit (Qiagen, Cat# 80204) according to the manufacturer’s instructions, and quantitated using a NanoDrop 2000 spectrophotometer. Samples were stored at -80oC.

**cDNA –**

* 1ug of RNA was combined with 2ul of a Random Primer mix (Thermo-Fisher, Cat# 48190011) and enough molecular grade water to bring the volume to 10ul, before being heated to 70oC for 6-7 minutes.
* The mixture was then placed on ice, and the following components were added before being heated at 37oC for 1-2 hours:
  + 4ul of 5X M-MLV-RT buffer
  + 4ul of 10mM PCR Nucleotide Mix (Millipore Sigma, Cat# 11814362001)
  + 1ul of RNasin Ribonuclease inhibitor (Promega, Cat# N2111)
  + 1ul M-MLV Reverse Transcriptase (Promega, Cat# M1701)
* 80ul of molecular grade water was then added to each sample and they were stored at -20oC.

**DNA –**

* DNA was extracted from frozen flank tumor tissue using the Gentra PureGene Tissue Kit (Qiagen, Cat# 158667), the AllPrep DNA/RNA Mini Kit (Qiagen, Cat# 80204), or the DNeasy Blood and Tissue Kit (Qiagen, Cat# 69506) according to the manufacturer’s instructions, and quantitated using a NanoDrop 2000 spectrophotometer. Samples were stored at 4oC.