RNA Isolation with TRIzol (Invitrogen)

This protocol applies to: Acute Lymphoblastic Leukemia Phase 1 (ALL P1), Acute Lymphoblastic Leukemia P2 (ALL P2), and Acute Lymphoblastic Leukemia Models (ALL MDLS/Xenografts)

The protocol herein describes the procedures used by University of New Mexico to process disease tissues for RNA and/or DNA subsequently used for characterization in the NCI's TARGET initiative. All nucleic acid samples used in TARGET projects were quality tested for consistency using picogreen quantification and SSTR genotyping methods, regardless of where the nucleic acid was originally extracted.

RNA was extracted from tumor samples using TRIzol (Invitrogen, Carlsbad, CA) according to the manufacturer's instructions (Invitrogen). Briefly, cryopreserved cells were thawed and gently pelleted. The supernatant was removed and the pellet was dispersed while adding TRIzol with vortexing (1 mL TRIzol/1x10^7 cells). Vortexing was continued until the lysate was homogeneous and clear.