

**File Name: Supplementary Data 1**

**Description:** Distribution of Robust Rank Aggregation (RRA) scores in genome-wide negative CRISPR/Cas9 screens (GeCKOV2 library and Brunello library);

**File Name: Supplementary Data 2**

**Description:** Targeted metabolomics unprocessed data determined by LC-MS in HeLa cells expressing inducible Tet-on *LbNOX*, *EcSTH* or *EcSTH-LbNOX* cultured with Dox (0.1 µg/ml) for 24 h.