For each sample we provide two paired data files, one with ibd extension and one with imzml extension that were generated by the Water Synapt G2 Si software (Waters Corporation, Milford, MA). The files can be visualized using the free, publicly available software msiQuant available at <https://ms-imaging.org/paquan/> ([DOI: 10.1021/acs.analchem.5b04603)](http://pubs.acs.org/doi/abs/10.1021/acs.analchem.5b04603) or Datacube Explorer (<https://amolf.nl/download/datacubeexplorer#:~:text=The%20Datacube%20Explorer%20software%20application,Biomap%20(Analyze%207.5)>.

In both the software, the .imzml files can be uploaded, but both the ibd and imzml files must be in the same directory for the software to work.

Files contain the following identifiers:

HCC-4059 PDX mutant KRAS

CP58391 PDX wild type KRAS wild type EGFR

HCC-4190 PDX wild type KRAS mutant EGFR

L140 lung cancer patient mutant KRAS

TH0737 lung cancer patient wild type KRAS wild type EGFR

TETO-KM mutant KRAS mouse model

A549 (A549 xenografts of mutant KRAS human lung cancer cell line in NOD SCID mice)

TVB3664 (A549 xenografts of mutant KRAS human lung cancer cell line in NOD SCID mice treated with TVB3664)