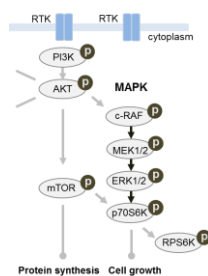


RPPA Protein & Pathway Profiling

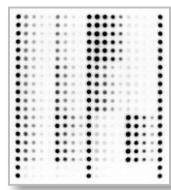
Interested in molecular profiling of cancer on the functional protein level?



RPPA contribute conclusive protein activation-level information to provide biological answers and to complement Next Generation Sequencing:

- Are pathways active downstream of a driver mutation?
- Will drug treatments be effective?
- What are the underlying molecular mechanisms?
- Can predictive marker proteins be identified?

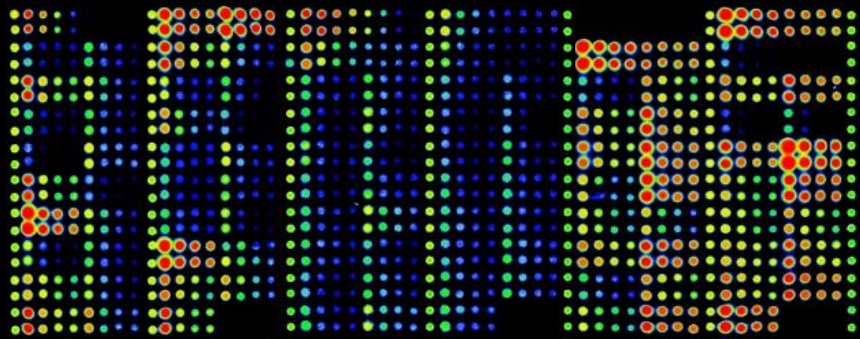
RPPA - Reverse Phase Protein Array Services



- Are relying on a well-validated miniaturized immunoassay technology
- Allow profiling of dozens to hundreds of samples & protein analytes in parallel
- Are highly sensitive and low in sample consumption
- Provide comprehensive signaling protein patterns from just 50 µg of protein
- Can be selected from currently >500 pre-validated antibodies and >50 pathway panels
- Cover total & post-translationally modified e.g. phospho proteins of key signaling pathways
- Enable profiling from various materials: 2D/3D cell cultures, tissues, xenografts, sections
- Have proven successful with >12 years of expertise in biomarker research, pathway mapping, lead compound profiling, drug mode-of-action studies, as well as toxicity and PK/PD marker studies
- Allow application in preclinical & clinical studies, using an established QM system
- Are being offered on a fee-for-service basis

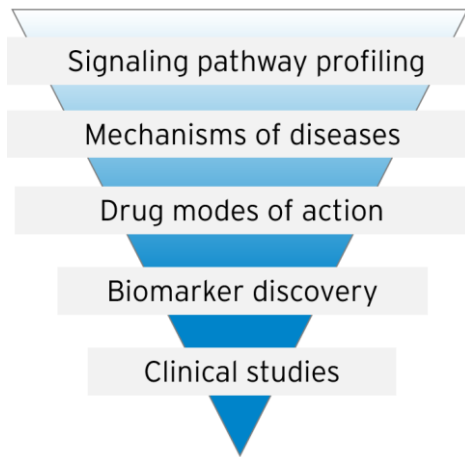
NMI TT Pharmaservices

- Is an established CRO with a long-standing track record with international pharma & biotech
- Offers a diverse portfolio of protein profiling technologies, for fully customizable studies in the preclinical & clinical space - please contact us to discuss how we can help you with your needs!



RPPA Protein & Pathway Profiling

Areas of Application



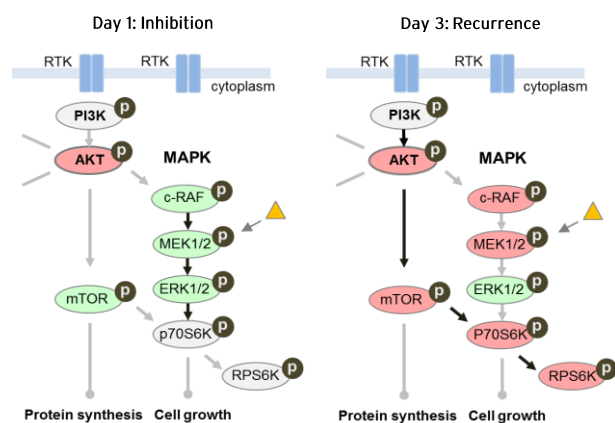
Work Flow for Service Studies



- Study design
- Sample supply
30 µg protein sufficient for a whole study
- Cell / tissue lysis & protein determination
- Printing of RPPA
- RPPA assays with validated antibodies
one array = one antibody
- Array & data analysis / Report

RPPA for Drug MoA Analyses

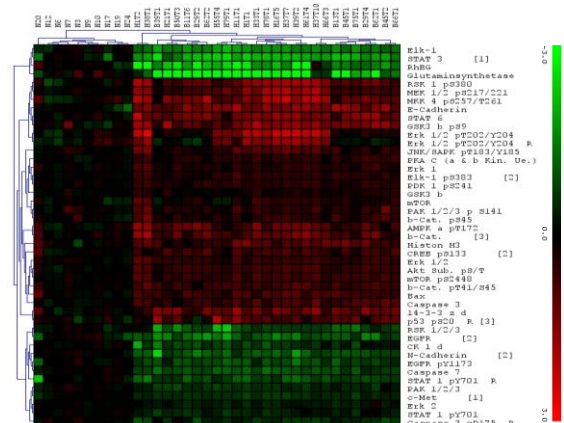
Comprehensive profiling of compound efficacy in tumor xenograft models



- RPPA analyses revealed in-depth insights into the drug mode of action over time, thus providing PD markers and the rationale for a combination therapy

RPPA for Cancer Pathway Profiling

Analysis of fresh frozen tumors vs normal liver at defined Ha-ras/B-raf mutation status



- RPPA allowed classification of tumor subtypes and pathway activation status representing different mutations, thereby adding value beyond genomics methods