

Tumor Tissue Microarrays

Tumor tissue microarrays (TMA) are effective tools for the histological analysis of tumors to discover biomarkers and characterize the mode of action of new drug candidates. They are also used for the analysis of drug target protein expression in a large set of tumors simultaneously to identify suitable mouse models for anticancer drug efficacy studies.

Reaction Biology's TMA is a paraffin block that contains tumor cores made from our syngeneic mouse models available for efficacy testing at our in vivo pharmacology unit.

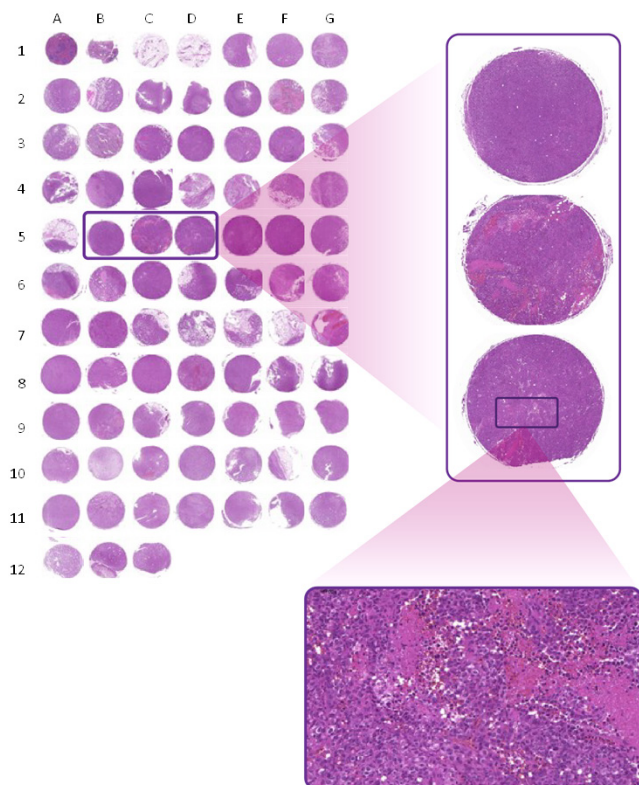
Our tumor tissue microarray empowers to:

- Select the best tumor model based on drug target expression
- Ensure the immune population needed for your mode of action is present in the tumor model of your choice
- Measure biomarkers predicting the response to your drug candidate

Images of our tumors stained with H&E, anti-CD3, anti-CD11b, anti-CD4 and anti-CD8 antibodies can be viewed in our interactive [TMA Gallery](https://tma.reactionbiology.com) (<https://tma.reactionbiology.com>).

[Contact us](#) to request a custom stain of our TMA or receive slides of our TMA for in-house staining.

TMA Layout



Position	Tumor name
1A-1B	Spleen control
1C-1D	Mammary fat pad control
1E-1F	4T, subQperior
1G-2A	4T1 M3, orthotopic
2B-2E	AB12, subQperior
2F-3B	B16-F10, subQperior
3C-3F	Clone M3, subQperior
3G-4C	CT26wt, subQperior
4D-4G	EMT6, subQperior
5A-5D	Hepa1-6, subQperior
5E-6A	LL/2, subQperior
6B-6E	MC38-CEA, subQperior
6F-7B	RENCA, subQperior
7C-7F	GL261, subQperior
7G-8C	RENCA, orthotopic
8D-8G	CT26wt, orthotopic
9A-9D	JA-0009
9E-10A	JA-2011
10B-10E	JA-2019
10F-11B	JA-2041
11C-11F	JA-2042
11G-12C	JA-0032

Immunohistochemistry for in-depth analysis of the mode of action

Immunohistochemistry (IHC) enables the identification of immune cells in tumor tissue and offers the opportunity to quantify target expression in the tumors.

Advantage of IHC compared to flow cytometry:

- The ability to visualize the localization of the target cell population. For example, you can see if immune cells that infiltrate the tumor are located in the stroma or migrate into the tumor tissue.
- IHC can be performed with several markers on one slide to co-localize immune populations to answer specific functional questions about the effects of immunotherapeutics.

IHC is usually used as a second line pharmacodynamic readout performed when flow cytometry or multiplex MSD have yielded promising results.

IHC for endpoint analysis or TMA analysis is performed by a partner lab specializing in histology work ensuring high quality results.

Biomarker Assay Services