

## Company

## RIN Institute Inc.

Biotech spinoff from National Cancer Center (NCC)

## Presenter

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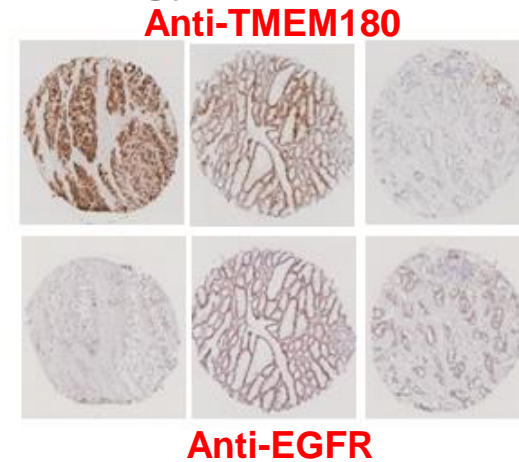


**Strength: Unique expression analysis & research capability on tumor stroma**

1. Anti-TMEM180 Antibody: Novel antibody drug for colorectal cancer (CRC) = #1 incidence in Japan (recent NCC data)

◆ Partnering with pharmaceutical company for co-development

- Ag obtained by unique expression analysis (platform technology)
- Low colony forming ability and reduced tumor take rate of TMEM180 knock-down SW480 CRC cells
- High (> 50%) positive rate in CRC tissue array by anti-TMEM180 Ab staining with similar staining intensity to anti-EGFR Ab
- Dramatic increase of expression under hypoxia
- Potent ADCC activity on TMEM180 positive CRC cells
- Prominent in vivo anti-tumor effect on CRC (k-ras mutated) xenograft, stronger than anti-EGFR Ab. 🐭 Complete regression observed.
- Master Cell Bank & Working Cell Bank established



Anti-EGFR

## 2. Unique anti-insoluble fibrin(AIF) antibody - drug conjugate (ADC)

### ◆ Research Collaboration with pharmaceutical company

- Recognize unique region uncovered only when fibrin clot forms by fibrinogen polymerization.
- Distinguish fibrin clots from fibrinogen, soluble fibrin, and D-dimer (degradation product of fibrin clot).
- Amino acid sequence completely conserved in mammals.
- Strong fibrin deposition in almost all tumor tissues, including glioma, lung, colon and pancreatic cancers, but not in normal tissues.
- Fibrin clot detected only at acute phase of onset of non-malignant diseases, but not late phase.
- Tumor growth inhibition by prototype ADC (AIF Ab—linker cleavable with tissue plasminogen activator—MMAE) and prolonged survival in spontaneous pancreatic cancer model.

