

■ General Information

Applications

- Immunohistochemistry
 - TUNEL for apoptosis
- In situ hybridization (ISH)
 - mRNA
 - miRNA
 - Fluorescent In situ hybridization (FISH)

Storage and stability

- Individual slide is put in an air-tight pack with inert gas.
- If the slides are stored at 4C, they are good for up to one year.

How processed

- Tissues were initially fixed with formalin except for some of the animal tissues
- Then, dehydrated with gradient ethanol; typically 1 hour each progressive steps; 70%, 90%, 95%, 99%, 100% x 3 times.
- Cleared by xylene, three changes for 1 hour each.
- Infiltrated with 60°C paraffin, three changes for 1 hour each
- Sectioned by microtome in 4 µm thickness

Before use

- Dry slides for 1 hour in a oven at 60C.
- Dewax slides in xylene for 4 minutes x 5 times.
- Hydrate slides in 100%, 95% and 75% ethanol for 3 minutes x 2 times each.
- Immerse slides in tap water for 5 minutes.

Slide orientation

- In most of the slides with 59 or 60 cores, the orientation is as below unless indicated otherwise. #60 location is usually filled with carbon for orientation.

| | | | | | | | | | | |
|-------------|----|----|----|----|----|----|----|----|----|----|
| Shaded area | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | 30 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |

■ Tissue types*

The "tissue type" column in the data sheet denotes the following categories.

1. normal tissue from a non-cancer patient
2. normal tissue from a cancer patient, but the cancer involves unrelated organ
3. normal tissue adjacent to the cancer
4. benign tumor
5. tumor of borderline malignancy or uncertain malignant potential
6. cancer

NBP2-30263 - Human Multi-tissue Tissue MicroArray (Cancer)

| No. | Age | Sex | Organ | Diagnosis | pTNM | Stage | NBP2-30216# | Tissue type* |
|-----|-----|-----|-----------------|--|---------|-------|-------------|--------------|
| 1 | 66 | F | Breast | infiltrating duct carcinoma | T2N0M0 | IIA | . | 6 |
| 2 | 43 | F | Breast | infiltrating duct carcinoma | T3N2aM0 | IIIA | 102 | 6 |
| 3 | 58 | F | Breast | infiltrating duct carcinoma | T2N3aM0 | IIIC | 103 | 6 |
| 4 | 46 | F | Breast | infiltrating duct carcinoma | T3N1aM0 | IIIA | 104 | 6 |
| 5 | 71 | F | Breast | infiltrating papillary carcinoma with signet ring cell carcinoma | T3N1aM0 | IIIA | 105 | 6 |
| 6 | 37 | F | Breast | infiltrating duct carcinoma | T3N3aM0 | IIIC | 106 | 6 |
| 7 | 53 | F | Breast | mixed infiltrating duct and lobular carcinoma | T3N2aM0 | IIIA | . | 6 |
| 8 | 30 | F | Breast | medullary carcinoma | T3N0M0 | IIB | 108 | 6 |
| 9 | 47 | F | Breast | atypical medullary carcinoma | T2N1aM0 | IIB | 109 | 6 |
| 10 | 39 | F | Breast | infiltrating ductal carcinoma | T2N0M0 | IIA | . | 6 |
| 11 | 32 | M | Liver | combined hepatocellular and cholangiocarcinoma | T3N0M0 | IIIA | 111 | 6 |
| 12 | 57 | M | Liver | hepatocellular carcinoma | T3N0M0 | IIIA | 112 | 6 |
| 13 | 58 | F | Liver | hepatocellular carcinoma | T3N0M0 | IIIA | . | 6 |
| 14 | 20 | M | Liver | hepatocellular carcinoma | T4N0M0 | IIIB | . | 6 |
| 15 | 63 | F | Liver | hepatocellular carcinoma | T1N0M0 | I | . | 6 |
| 16 | 66 | F | Liver | hepatocellular carcinoma | T1N0M0 | I | . | 6 |
| 17 | 61 | M | Liver | hepatocellular carcinoma | T1N0M0 | I | 117 | 6 |
| 18 | 52 | M | Liver | hepatocellular carcinoma | T3N0M0 | IIIA | . | 6 |
| 19 | 50 | M | Liver | combined hepatocellular and cholangiocarcinoma | T3N1M0 | IIIC | 119 | 6 |
| 20 | 56 | M | Liver | hepatocellular carcinoma | T3N0M0 | IIIA | . | 6 |
| 21 | 53 | M | Urinary bladder | mucinous adenocarcinoma from urachal remnant | T4bN0M0 | IV | 121 | 6 |
| 22 | 60 | M | Urinary bladder | transitional cell carcinoma | T3bN1M0 | IV | . | 6 |
| 23 | 60 | M | Urinary bladder | transitional cell carcinoma | T3bN1M0 | IV | 123 | 6 |
| 24 | 65 | M | Urinary bladder | transitional cell carcinoma | T4aN1M1 | IV | 124 | 6 |
| 25 | 74 | M | Urinary bladder | transitional cell carcinoma | T1N0M0 | I | 125 | 6 |
| 26 | 63 | F | Urinary bladder | transitional cell carcinoma | T1N0M0 | I | 126 | 6 |
| 27 | 58 | M | Urinary bladder | transitional cell carcinoma | T3NXM0 | III | . | 6 |
| 28 | 46 | M | Urinary bladder | transitional cell carcinoma | T1N0M0 | I | 128 | 6 |
| 29 | 76 | M | Urinary bladder | transitional cell carcinoma | T3NXM0 | III | . | 6 |
| 30 | 63 | M | Urinary bladder | transitional cell carcinoma | T3bN0M0 | III | 130 | 6 |
| 31 | 57 | F | Ovary | serous adenocarcinoma | T3bN1M0 | IIIC | . | 6 |
| 32 | 48 | F | Ovary | serous adenocarcinoma, moderately differentiated | T3cN0M0 | IIIC | . | 6 |
| 33 | 60 | F | Ovary | serous surface papillary carcinoma, poorly differentiated | T2cN0M0 | IIC | 133 | 6 |
| 34 | 41 | F | Ovary | serous adenocarcinoma, moderately differentiated | T2cN1M0 | IIIC | . | 6 |
| 35 | 64 | F | Ovary | serous adenocarcinoma | T3cN0M0 | IIIC | 135 | 6 |
| 36 | 60 | F | Ovary | serous adenocarcinoma | T3cN1M0 | IIIC | . | 6 |
| 37 | 54 | F | Ovary | serous adenocarcinoma | T3aN0M0 | IIIA | . | 6 |
| 38 | 58 | F | Ovary | serous adenocarcinoma | T2cN0M0 | IIC | . | 6 |
| 39 | 16 | F | Ovary | mucinous adenocarcinoma | T1aN0M0 | IA | . | 6 |
| 40 | 57 | F | Ovary | serous adenocarcinoma, poorly differentiated | T3cN0M0 | IIIC | . | 6 |
| 41 | 66 | M | Pancreas | ductal adenocarcinoma, moderately differentiated | T4N1M0 | III | 141 | 6 |
| 42 | 71 | M | Pancreas | ductal adenocarcinoma, moderately differentiated | T3N1M0 | IIB | . | 6 |
| 43 | 68 | M | Pancreas | ductal adenocarcinoma, moderately differentiated | T3N1M0 | IIB | 143 | 6 |
| 44 | 45 | M | Pancreas | ductal adenocarcinoma, moderately differentiated | T3N1M0 | IIB | 144 | 6 |
| 45 | 64 | F | Pancreas | ductal adenocarcinoma, moderately differentiated | T4N0M0 | III | . | 6 |
| 46 | 64 | F | Pancreas | ductal adenocarcinoma, moderately differentiated | T3N1M0 | IIB | . | 6 |
| 47 | 69 | M | Pancreas | ductal adenocarcinoma, poorly differentiated | T4NxM0 | III | 147 | 6 |
| 48 | 46 | M | Pancreas | ductal adenocarcinoma, moderately differentiated | T3N1M0 | IIB | . | 6 |
| 49 | 54 | M | Pancreas | ductal adenocarcinoma, moderately differentiated | T3N1M0 | IIB | . | 6 |
| 50 | 40 | M | Pancreas | ductal adenocarcinoma, moderately differentiated | T3N1M0 | IIB | 150 | 6 |
| 51 | 85 | M | Prostate | adenocarcinoma | TxN0M1 | IV | . | 6 |
| 52 | 79 | M | Prostate | adenocarcinoma | T2aN0M1 | IV | . | 6 |
| 53 | 53 | M | Prostate | adenocarcinoma | T2aN0M1 | IV | . | 6 |
| 54 | 68 | M | Prostate | adenocarcinoma | T2bN0M0 | II | . | 6 |
| 55 | 82 | M | Prostate | adenocarcinoma | T2N0M1 | IV | . | 6 |
| 56 | 76 | M | Prostate | adenocarcinoma | T3aN0M0 | III | . | 6 |
| 57 | 56 | M | Prostate | adenocarcinoma | T2cN1M0 | IV | . | 6 |
| 58 | 66 | M | Prostate | adenocarcinoma | T4N0M0 | IV | . | 6 |
| 59 | 54 | M | Prostate | adenocarcinoma | T1aN0M0 | II | 159 | 6 |
| 60 | . | . | Carbon | . | . | . | . | . |

#: The normal tissue in NBP2-30216 of corresponding number is from the identical patient. TNM and Stage: AJCC Cancer Staging Manual (6th Edition)