■ 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

NBP2-30220 - Human Kidney Tissue MicroArray (Cancer)

No.	Age	Sex	Organ	Diagnosis	TNM	Tissue type*
1	52	F	Kidney	renal cell carcinoma, granular cell type	T2bNXM0	6
2	60	F	Kidney	renal cell carcinoma, clear cell type	T3aN0M1*	6
3	42	M	Kidney	renal cell carcinoma, clear cell type	T3aN0M0	6
4	59	M	Kidney	renal cell carcinoma, clear cell type	T2aN0M0	6
5	67	F	Kidney	renal cell carcinoma, clear cell and granular cell type	T2aNXM0	6
6	65	M	Kidney	renal cell carcinoma, clear cell and granular cell type	T2bNXM0	6
7	59	M	Kidney	renal cell carcinoma, clear cell and granular cell type	T1bNXM0	6
8	56	M	Kidney	renal cell carcinoma, clear cell and pseudosarcomatous type	T1bN0M1*	6
9	42	F	Kidney	renal cell carcinoma, clear cell type	T3aNXM0	6
10	50	M	Kidney	renal cell carcinoma, clear cell type	T1aN0M0	6
11	52	M	Kidney	renal cell carcinoma, clear cell type	T1aN0M0	6
12	68	F	Kidney	renal cell carcinoma, clear cell type	T3aN0M0	6
13	60	F	Kidney	renal cell carcinoma, clear cell type	T3aN0M0	6
14	69	F	Kidney	renal cell carcinoma, clear cell type	T2aNXM0	6
15	54	M	Kidney	renal cell carcinoma, clear cell type	T1bNXM0	6
16	43	F	Kidney	renal cell carcinoma, clear cell type	T1aN0M0	6
17	53	M	Kidney	renal cell carcinoma, clear cell type	T3aN0M1**	6
18	59	M	Kidney	renal cell carcinoma, clear cell type	T3aN0M0	6
19	61	M	Kidney	renal cell carcinoma, collecting duct type	T1aNXM0	6
20	40	M	Kidney	renal cell carcinoma, clear cell type	T1aNXM0	6
21	52	M	Kidney	renal cell carcinoma, clear cell type	T1bN0M0	6
22	63	F	Kidney	renal cell carcinoma, clear cell and granular cell type	T2aN0M0	6
23	64	M	Kidney	renal cell carcinoma, clear cell type	T1bN0M0	6
24	37	M	Kidney	renal cell carcinoma, collecting duct type	T2bN0M0	6
25	65	M	Kidney	renal cell carcinoma, papillary type	T1bNXM0	6
26	74	M	Kidney	renal cell carcinoma, clear cell type	T3aN0M0	6
27	67	M	Kidney	renal cell carcinoma, clear cell type	T4NXM0	6
28	50	M	Kidney	renal cell carcinoma	T2aN0M0	6
29	74	M	Kidney	renal cell carcinoma, clear cell type	T3aN0M0	6
30	62	M	Kidney	renal cell carcinoma, clear cell and granular cell type	T3aN0M0	6
31	64	M	Kidney	renal cell carcinoma, papillary type	T1aNXM0	6
32	45	M	Kidney	renal cell carcinoma, clear cell type	T1bN0M0	6
33	62	M	Kidney	renal cell carcinoma	T3aN1M0	6
34	53	M	Kidney	renal cell carcinoma, clear cell type	T1bNXM0	6
35	64	M	Kidney	renal cell carcinoma, clear cell type	T1bNXM0	6
36	72	M	Kidney	renal cell carcinoma, clear cell type	T1aNXM0	6
37	62	F	Kidney	renal cell carcinoma, clear cell type	T3aN0M0	6
38	56	M	Kidney	renal cell carcinoma, clear cell type	T3aN0M0	6
39	58	M	Kidney	renal cell carcinoma	T2aN0M0	6
40	57	M	Kidney	renal cell carcinoma, clear cell and granular cell type	T3bN0M0	6
41	64	F	Kidney	transitional cell carcinoma, pelvis	.	6
42	43	F	Kidney	renal cell carcinoma, clear cell type	T1bN0M0	6
43	52	F	Kidney	renal cell carcinoma, granular cell type	T1bN0M0	6
44	64	M	Kidney	renal cell carcinoma, granular cell type	T3aN0M0	6
45	57	M	Kidney	renal cell carcinoma, clear cell type	T1bN0M0	6
46	59	M	Kidney	renal cell carcinoma, clear cell and granular cell type	T2aNXM0	6
47	47	M	Kidney	renal cell carcinoma, clear cell type	T1aNXM0	6
48	77	M	Kidney	renal cell carcinoma, clear cell type	T1aN0M0	6
49	47	F	Kidney	renal cell carcinoma, clear cell and granular cell type	T2aNXM0	6
50	55	F	Kidney	renal cell carcinoma, clear cell type	T3aN0M0	6
51	59	M	Kidney	Normal of No. 4	.	3
52	43	F	Kidney	Normal of No. 16	.	3
53	40	M	Kidney	Normal of No. 20	.	3
54	52	M	Kidney	Normal of No. 21	.	3
55	62	M	Kidney	Normal of No. 30	.	3
56	72	M	Kidney	Normal of No. 36	.	3
57	43	F	Kidney	Normal of No. 42	.	3
58	77	M	Kidney	Normal of No. 48	.	3
59	55	F	Kidney	Normal of No. 50	.	3
60	.	.	Carbon	.	.	.

#2 *: lung metastasis
#8 *: metastasis to contralateral kidney
#17 *: perinephric fat involvement, **: bone metastasis
TNM and Stage: AJCC Cancer Staging Manual (7th Edition)