
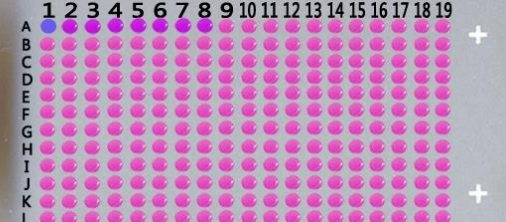


Cat No: LVC2281 - Liver cancer tissue array

Lot#	Cores	Size	Cut	Format	QA/QC		
LVC228101	228	1.1mm	4um	12X19	H&E, IHC anti-Cytokeratin		

Recommended applications: For Research use only. RNA or protein liver cancer/non-tumor tissue profiling using IHC or ISH; Antibody characterization.

Description: Liver cancer tissue array containing 5 cases of normal/benign conditions and 223 cases of cancers with grading and TNM staging data.

All the tissues were from surgical resection. They were fixed in 10% neutral buffered formalin for 24 hours and processed using identical SOPs. Sections were picked onto Superfrost Plus or APES coated Superfrost slides. They can be stored for use at 4C for up to six months from the date of shipment. **There may be 5 to 10% of tissue core loss.**

Array Position	Sex	Age	Anatomic Site	Pathology	Grade	Stage
A01	M	54	Liver	Hepatocellular carcinoma	I	T2N0M0
A02	M	40	Liver	Hepatocellular carcinoma	II	T2N0M0
A03	M	48	Liver	Hepatocellular carcinoma	II~III	T3N0M0
A04	M	39	Liver	Hepatocellular carcinoma	II	T2N0M0
A05	M	30	Liver	Hepatocellular carcinoma	II~III	T2N0M0
A06	M	33	Liver	Hepatocellular carcinoma	III	T2N0M0
A07	M	47	Liver	Hepatocellular carcinoma	II	T2N0M0
A08	M	65	Liver	Hepatocellular carcinoma	III	T2N0M0
A09	M	68	Liver	Hepatocellular carcinoma	III	T2N0M0
A10	F	32	Liver	Hepatocellular carcinoma	III	T1N0M0
A11	M	52	Liver	Hepatocellular carcinoma	I~II	T2N0M0
A12	F	46	Liver	Hepatocellular carcinoma	II~III	T2N1M0
A13	F	45	Liver	Mucin-producing cholangiocarcinoma	II	T3N1M1
A14	F	35	Liver	Hepatocellular carcinoma	III	T3N0M0
A15	F	52	Liver	Hepatocellular carcinoma	II	T1N0M0
A16	M	47	Liver	Hepatocellular carcinoma	II	T3N0M0
A17	M	57	Liver	Hepatocellular carcinoma	II~III	T2N0M0
A18	M	47	Liver	Hepatocellular carcinoma	II~III	T3N0M0
A19	M	40	Liver	Hepatocellular carcinoma	I~II	T2N0M0
B01	F	31	Liver	Hepatocellular carcinoma	II~III	T3N0M0
B02	M	41	Liver	Hepatocellular carcinoma	II	T2N0M0
B03	M	57	Liver	Hepatocellular carcinoma	II	T3N1M0
B04	M	49	Liver	Hepatocellular carcinoma	II~III	T3N1M0
B05	F	39	Liver	Metastatic adenocarcinoma	null	
B06	M	41	Liver	Hepatocellular carcinoma	II	T3N0M0
B07	M	36	Liver	Hepatocellular carcinoma	II~III	T2N0M0
B08	M	61	Liver	Hepatocellular carcinoma	I~II	T2N0M0
B09	M	43	Liver	Hepatocellular carcinoma	I~II	T3N1M0
B10	F	58	Liver	Cholangiocarcinoma	II	T3N1M0
B11	M	54	Liver	Hepatocellular carcinoma	III	T4N1M0
B12	M	40	Liver	Hepatocellular carcinoma	I~II	T2N0M0
B13	F	62	Liver	Hepatocellular carcinoma	II	T3N0M0
B14	M	50	Liver	Hepatocellular carcinoma	II~III	T3N0M0
B15	M	47	Liver	Hepatocellular carcinoma	II~III	T3N0M0
B16	M	79	Liver	Hepatocellular carcinoma	II~III	T3N0M0
B17	M	44	Liver	Hepatocellular carcinoma	II~III	T3N0M0
B18	M	45	Liver	Hepatocellular carcinoma	III	T3N0M0
B19	M	39	Liver	Hepatocellular carcinoma	III	T3N0M0
C01	M	59	Liver	Hepatocellular carcinoma	II~III	T4N0M0
C02	F	80	Liver	Cholangiocarcinoma	II~III	T3N1M0

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C03	F	35	Liver	Hepatocellular carcinoma?	I~II	T3N0M0
C04	M	42	Liver	Hepatocellular carcinoma	II	T3N0M0
C05	M	58	Liver	Hepatocellular carcinoma	II~III	T4N1M1
C06	M	61	Liver	Hepatocellular carcinoma	II~III	T4N0M0
C07	M	44	Liver	Hepatocellular carcinoma	II	T3N0M0
C08	F	37	Liver	Hepatocellular carcinoma	II	T4N0M0
C09	M	35	Liver	Hepatocellular carcinoma	II	T2N0M0
C10	F	35	Liver	Hepatocellular carcinoma	II	T3N0M0
C11	F	43	Liver	Hepatocellular carcinoma	II	T2N0M0
C12	M	38	Liver	Hepatocellular carcinoma	II	T2N0M0
C13	M	30	Liver	Hepatocellular carcinoma	II	T2N0M0
C14	M	36	Liver	Hepatocellular carcinoma	I	T3N0M0
C15	M	60	Liver	Metastatic colon adenocarcinoma	null	null
C16	M	19	Liver	Hepatocellular carcinoma	I~II	T2N0M0
C17	M	39	Liver	Hepatocellular carcinoma	II	T2N0M0
C18	M	77	Liver	Hepatocellular carcinoma	II	T2N0M0
C19	M	65	Liver	Hepatocellular carcinoma	II	T2N0M0
D01	F	40	Liver	Hepatocellular carcinoma	III	T2N0M0
D02	M	41	Liver	Hepatocellular carcinoma	II	T2N0M0
D03	F	29	Liver	Hepatocellular carcinoma	II	T2N0M0
D04	M	59	Liver	Hepatocellular carcinoma	II	T3N0M0
D05	M	33	Liver	Cholangiocarcinoma	II~III	T4N1M0
D06	M	30	Liver	Hepatocellular carcinoma	II	T2N0M0
D07	M	29	Liver	Hepatocellular carcinoma	I~II	T2N0M0
D08	M	37	Liver	Hepatocellular carcinoma	II~III	T2N0M0
D09	M	77	Liver	Hepatocellular carcinoma	II	T2N0M0
D10	M	52	Liver	Hepatocellular carcinoma	II	T4N1M0
D11	M	59	Liver	Hepatocellular carcinoma	I~II	T3N0M0
D12	M	41	Liver	Hepatocellular carcinoma	II~III	T2N0M0
D13	M	39	Liver	Hepatocellular carcinoma	II	T2N0M0
D14	F	38	Liver	Hepatocellular carcinoma	II~III	T2N0M0
D15	M	52	Liver	Hepatocellular carcinoma	II	T3N0M0
D16	M	41	Liver	Hepatocellular carcinoma	II	T3N0M0
D17	M	69	Liver	Hepatocellular carcinoma	II	T3N0M0
D18	M	38	Liver	Hepatocellular carcinoma	II	T2N0M0
D19	M	76	Liver	Hepatocellular carcinoma	II	T3N0M0
E01	M	50	Liver	Hepatocellular carcinoma	II	T2N0M0
E02	M	53	Liver	Hepatocellular carcinoma	II	T2N0M0
E03	M	38	Liver	Hepatocellular carcinoma	I~II	T3N0M0
E04	M	30	Liver	Mixed cholangiocarcinoma and hepatocellular carcinoma	II	T2N0M0
E05	M	42	Liver	Hepatocellular carcinoma	II	T2N0M0
E06	M	1.5	Liver	Hepatoblastoma	null	null
E07	M	66	Liver	Hepatocellular carcinoma	I	T3N1M0
E08	M	51	Liver	Hepatocellular carcinoma	II	T2N0M0
E09	M	52	Liver	Hepatocellular carcinoma	II	T2N0M0
E10	M	56	Liver	Hepatocellular carcinoma	II~III	T3N0M0
E11	M	56	Liver	Hepatocellular carcinoma	II	T4N1M0
E12	M	49	Liver	Hepatocellular carcinoma	II	T4N0M0
E13	M	57	Liver	Hepatocellular carcinoma	II~III	T4N1M0
E14	F	21	Liver	Hepatocellular carcinoma	I	T2N0M0
E15	M	53	Liver	Hepatocellular carcinoma	II	T2N0M0
E16	M	66	Liver	Hepatocellular carcinoma	I	T2N0M0
E17	M	56	Liver	Hepatocellular carcinoma	II	T2N0M0
E18	M	39	Liver	Cholangiocarcinoma	II~III	T2N0M0
E19	M	30	Liver	Hepatocellular carcinoma	I~II	T2N0M0
F01	M	32	Liver	Hepatocellular carcinoma	null	T3N0M0
F02	M	45	Liver	Hepatocellular carcinoma	II	T2N0M0
F03	M	78	Liver	Hepatocellular carcinoma	II	T3N0M0
F04	M	57	Liver	Hepatocellular carcinoma	III	T2N0M0
F05	F	32	Liver	Hepatocellular carcinoma	II	T3N0M0

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F06	M	37	Liver	Hepatocellular carcinoma	III	T2N0M0
F07	F	69	Liver	Cholangiocarcinoma	II	T4N1M0
F08	M	38	Liver	Hepatocellular carcinoma	II~III	T2N0M0
F09	M	65	Liver	Hepatocellular carcinoma	I	T2N0M0
F10	M	44	Liver	Hepatocellular carcinoma	II	T2N0M0
F11	M	43	Liver	Leiomyosarcoma	null	null
F12	M	32	Liver	Hepatocellular carcinoma	II	T2N0M0
F13	M	55	Liver	Hepatocellular carcinoma	III	T1N0M0
F14	M	51	Liver	Cholangiocarcinoma	II	T2N0M0
F15	M	57	Liver	Metastatic colon adenocarcinoma	null	null
F16	F	40	Liver	Hepatocellular carcinoma	II	T2N0M0
F17	M	60	Liver	Hepatocellular carcinoma	II	T2N0M0
F18	M	36	Liver	Hepatocellular carcinoma	II	T2N0M0
F19	M	40	Liver	Hepatocellular carcinoma	I	T2N0M0
G01	M	43	Liver	Hepatocellular carcinoma	II	T2N0M0
G02	M	57	Liver	Metastatic adenocarcinoma	null	null
G03	M	63	Liver	Hepatocellular carcinoma	II	T2N0M0
G04	M	67	Liver	Hepatocellular carcinoma	I	T2N0M0
G05	M	61	Liver	Metastatic gastric adenocarcinoma?	null	null
G06	M	35	Liver	Hepatocellular carcinoma	II	T3N0M0
G07	M	31	Liver	Hepatocellular carcinoma	III	T2N0M0
G08	M	53	Liver	Hepatocellular carcinoma	III	T2N0M0
G09	M	29	Liver	Hepatocellular carcinoma	II	T4N0M0
G10	M	61	Liver	Hepatocellular carcinoma	II~III	T4N1M1
G11	M	40	Liver	Hepatocellular carcinoma	II	T2N0M0
G12	M	55	Liver	Hepatocellular carcinoma	II	T2N0M0
G13	M	56	Liver	Hepatocellular carcinoma	II	T3N0M0
G14	F	73	Liver	Hepatocellular carcinoma	II	T3N0M0
G15	M	34	Liver	Hepatocellular carcinoma	null	T2N0M0
G16	M	42	Liver	Metastatic adenocarcinoma	null	null
G17	F	60	Liver	Hepatocellular carcinoma	II	T2N0M0
G18	F	70	Liver	Cholangiocarcinoma	II	T3N0M0
G19	M	31	Liver	Hepatocellular carcinoma	III	T2N0M0
H01	M	26	Liver	Hepatocellular carcinoma	I	T2N0M0
H02	M	65	Liver	Hepatocellular carcinoma, clear cell type	II	T2N0M0
H03	M	18	Liver	Hepatocellular carcinoma	II	T2N0M0
H04	M	41	Liver	Hepatocellular carcinoma	II	T2N0M0
H05	M	70	Liver	Hepatocellular carcinoma	II	T3N0M0
H06	F	58	Liver	Hepatocellular carcinoma	III	T2N0M0
H07	F	43	Liver	Hepatocellular carcinoma	II	T2N0M0
H08	M	67	Liver	Hepatocellular carcinoma	II	T2N0M0
H09	M	50	Liver	Hepatocellular carcinoma	I	T2N0M0
H10	F	52	Liver	Hepatocellular carcinoma	II	T2N0M0
H11	M	54	Liver	Hepatocellular carcinoma	II	T2N0M0
H12	M	40	Liver	Hepatocellular carcinoma	II	T2N0M0
H13	M	56	Liver	Hepatocellular carcinoma	II	T3N0M0
H14	M	31	Liver	Hepatocellular carcinoma	II	T3N0M0
H15	M	58	Liver	Hepatocellular carcinoma	II	T2N0M0
H16	M	41	Liver	Hepatocellular carcinoma	III	T2N0M0
H17	M	44	Liver	Hepatocellular carcinoma	I~II	T2N0M0
H18	F	40	Liver	Hepatocellular carcinoma	III	T2N0M0
H19	M	48	Liver	Hepatocellular carcinoma	I	T2N0M0
I01	M	35	Liver	Hepatocellular carcinoma	III	T3N0M0
I02	M	44	Liver	Hepatocellular carcinoma	II	T2N0M0
I03	F	45	Liver	Fibrosarcoma?	null	null
I04	M	53	Liver	Hepatocellular carcinoma	III	T3N0M0
I05	M	53	Liver	Hepatocellular carcinoma	II~III	T2N0M0
I06	M	60	Liver	Hepatocellular carcinoma	II	T2N0M0
I07	M	59	Liver	Mixed cholangiocarcinoma and hepatocellular carcinoma	I~II	T2N0M0
I08	M	38	Liver	Hepatocellular carcinoma	III	T3N0M0

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I09	M	60	Liver	Hepatocellular carcinoma	II	T3N0M0
I10	M	68	Liver	Hepatocellular carcinoma	II	T3N0M0
I11	M	51	Liver	Mixed cholangiocarcinoma and hepatocellular carcinoma	II	T3N0M0
I12	M	59	Liver	Hepatocellular carcinoma	III	T4N0M0
I13	F	60	Liver	Metastatic colon adenocarcinoma	null	null
I14	M	43	Liver	Hepatocellular carcinoma	II~III	T3N0M0
I15	M	36	Liver	Hepatocellular carcinoma	I~II	T2N0M0
I16	M	53	Liver	Hepatocellular carcinoma	II~III	T2N0M0
I17	M	50	Liver	Hepatocellular carcinoma	I~II	T2N0M0
I18	M	37	Liver	Hepatocellular carcinoma	III	T3N0M0
I19	M	47	Liver	Cholangiocarcinoma	III	T4N0M0
J01	M	40	Liver	Hepatocellular carcinoma	II~III	T3N0M0
J02	F	54	Liver	Cholangiocarcinoma	II	T2N0M0
J03	M	42	Liver	Hepatocellular carcinoma	I	T2N0M0
J04	F	48	Liver	Hepatocellular carcinoma	I~II	T2N0M0
J05	F	40	Liver	Hepatocellular carcinoma	I~II	T3N0M0
J06	M	37	Liver	Hepatocellular carcinoma	II	T3N0M0
J07	M	60	Liver	Hepatocellular carcinoma	I	T2N0M0
J08	M	36	Liver	Hepatocellular carcinoma	I~II	T2N0M0
J09	M	47	Liver	Hepatocellular carcinoma	II	T2N0M0
J10	M	75	Liver	Hepatocellular carcinoma	I~II	T3N0M0
J11	M	40	Liver	Hepatocellular carcinoma	II	T2N0M0
J12	M	54	Liver	Hepatocellular carcinoma	I	T2N0M0
J13	M	32	Liver	Hepatocellular carcinoma	II	T2N0M0
J14	M	44	Liver	Hepatocellular carcinoma	II	T3N0M0
J15	M	43	Liver	Hepatocellular carcinoma	II~III	T2N0M0
J16	F	39	Liver	Hepatocellular carcinoma	II	T1N0M0
J17	F	52	Liver	Metastatic squamous cell carcinoma	null	null
J18	M	44	Liver	Hepatocellular carcinoma	II	T2N0M0
J19	F	50	Liver	Hepatocellular carcinoma	II~III	T3N1M0
K01	F	45	Liver	Hepatocellular carcinoma	II	T2N0M0
K02	M	40	Liver	Hepatocellular carcinoma	II	T3N0M0
K03	M	65	Liver	Hepatocellular carcinoma	III	T3N0M0
K04	M	41	Liver	Hepatocellular carcinoma	II	T2N0M0
K05	M	54	Liver	Hepatocellular carcinoma	I	T2N0M0
K06	M	60	Liver	Hepatocellular carcinoma	II	T3N0M0
K07	F	50	Liver	Hepatocellular carcinoma	II~III	T2N0M0
K08	M	63	Liver	Hepatocellular carcinoma	I~II	T2N0M0
K09	M	31	Liver	Hepatocellular carcinoma	II	T2N0M0
K10	M	57	Liver	Hepatocellular carcinoma	I	T2N0M0
K11	M	43	Liver	Hepatocellular carcinoma	I	T3N0M0
K12	F	31	Liver	Hepatocellular carcinoma	II~III	T3N0M0
K13	M	50	Liver	Hepatocellular carcinoma	II	T4N1M0
K14	M	44	Liver	Hepatocellular carcinoma	II	T2N0M0
K15	M	23	Liver	Hepatocellular carcinoma	I~II	T3N0M0
K16	F	54	Liver	Hepatocellular carcinoma	II	T3N0M0
K17	M	42	Liver	Hepatocellular carcinoma	I	T2N0M0
K18	F	63	Liver	Cholangiocarcinoma	null	T1N0M0
K19	M	35	Liver	Hepatocellular carcinoma	II	T3N0M0
L01	M	43	Liver	Hepatocellular carcinoma	II	T2N0M0
L02	M	47	Liver	Hepatocellular carcinoma	I~II	T3N0M0
L03	M	47	Liver	Mixed cholangiocarcinoma and hepatocellular carcinoma	null	T2N0M0
L04	M	60	Liver	Hepatocellular carcinoma	I	T1N0M0
L05	M	66	Liver	Mixed cholangiocarcinoma and hepatocellular carcinoma	null	T3N0M0
L06	M	47	Liver	Hepatocellular carcinoma	I~II	T1N0M0
L07	M	60	Liver	Cholangiocarcinoma	II~III	T3N0M0
L08	M	55	Liver	Hepatocellular carcinoma	III	T3N0M0
L09	M	50	Liver	Hepatocellular carcinoma	I	T1N0M0
L10	M	38	Liver	Hepatocellular carcinoma	II	T2N0M0



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L11	M	56	Liver	Hepatocellular carcinoma	I	T3N0M0
L12	F	57	Liver	Cholangiocarcinoma	null	T2N0M0
L13	M	53	Liver	Hepatocellular carcinoma	I	T2N0M0
L14	F	61	Liver	Hepatocellular carcinoma	II~III	T3N0M0
L15	M	45	Liver	Viral hepatitis related cirrhosis	null	null
L16	M	46	Liver	Viral hepatitis related cirrhosis	null	null
L17	M	58	Liver	Viral hepatitis related cirrhosis	null	null
L18	M	52	Liver	Normal	null	null
L19	F	49	Liver	Normal	null	null

Notes: Bake at 60C for ~60 minutes before use. If antigen retrieving is needed, it is important to avoid **direct-boiling and high pH or high strength** antigen retrieving buffer. For availability of complimentary IHC data, please contact us at info@pantomics.com.

Certified by: Fancai Li, M.D.

TNM Classification: Liver carcinoma

T- Primary tumor

- TX - Primary tumor cannot be assessed
- TO - No evidence of primary tumor
- T1 - Solitary tumor without vascular invasion
- T2 - Solitary tumor with vascular invasion or multiple tumors none larger than 5cm
- T3 - Multiple tumors more than 5 cm, or tumor involving a major branch of the portal or hepatic vein(s)
- T4 - Tumor(s) with direct invasion of adjacent organs other than the gallbladder or with perforation of visceral peritoneum

N - Regional lymph nodes

- NX - Regional lymph nodes cannot be assessed
- NO - No regional lymph node metastasis
- N1 - Regional lymph node metastasis

M - Distant metastasis

- MX - Distant metastasis cannot be assessed
- MO - No distant metastasis
- M1 - Distant metastasis