

**Table S2A.** Characteristics of the colorectal cancer samples

ID	Patient age (years)	Sex	Tissue derivation	Location of original tumor	Clinical Stage	Sample type	Screen
Co74	35	F	Liver metastasis	Sigmoid	IV	Cell line	Discovery
Co92	46	F	Liver metastasis	Right colon	IV	Cell line	Discovery
Co108	77	F	Liver metastasis	Right colon	IV	Cell line	Discovery
Mx22	66	F	Liver metastasis	Unknown	IV	Xenograft	Discovery
Mx27	74	F	Liver metastasis	Right colon	IV	Xenograft	Discovery
Mx30	62	F	Liver metastasis	Sigmoid	IV	Xenograft	Discovery
Mx32	56	F	Liver metastasis	Right colon	IV	Xenograft	Discovery
Mx38	67	M	Liver metastasis	Rectum	IV	Xenograft	Discovery
Mx41	57	M	Liver metastasis	Right colon	IV	Xenograft	Discovery
Mx42	72	M	Liver metastasis	Left colon	IV	Xenograft	Discovery
Mx43	72	M	Liver metastasis	Sigmoid	IV	Xenograft	Discovery
Co79	81	M	Lymph node metastasis	Right colon	IV	Cell line	Validation
Co82	80	F	Primary colorectal tumor	Right colon	IV	Cell line	Validation
Co84	40	M	Lymph node metastasis	Right colon	III	Cell line	Validation
Co94	46	M	Lymph node metastasis	Rectum	IV	Cell line	Validation
Mx3	64	M	Primary colorectal tumor	Right colon	IV	Xenograft	Validation
Mx8	65	M	Primary colorectal tumor	rectal	IV	Xenograft	Validation
Mx26	45	F	Liver metastasis	Right colon	IV	Xenograft	Validation
Mx29	51	M	Liver metastasis	Left colon	IV	Xenograft	Validation
Mx31	50	M	Liver metastasis	Rectum	IV	Xenograft	Validation
Mx34	82	F	Lymph node metastasis	Right colon	IV	Xenograft	Validation
Mx35	57	F	Lung metastasis	Rectum	IV	Xenograft	Validation
Mx40	75	F	Lymph node metastasis	Right colon	III	Xenograft	Validation
Mx45	67	F	Liver metastasis	Transverse colon	IV	Xenograft	Validation
Hx005	62	F	Liver metastasis	Splenic flexure	IV	Xenograft	Validation
Hx169	68	M	Liver metastasis	Rectum	IV	Xenograft	Validation
Hx172	69	F	Liver metastasis	Unknown	IV	Xenograft	Validation
Hx174	73	F	Liver metastasis	Sigmoid	IV	Xenograft	Validation
Hx185	39	F	Liver metastasis	Rectosigmoid	IV	Xenograft	Validation
Hx188	60	M	Liver metastasis	Left	IV	Xenograft	Validation
Hx189	72	M	Liver metastasis	Left	IV	Xenograft	Validation
Hx190	73	M	Liver metastasis	Right	IV	Xenograft	Validation
Hx206	54	M	Liver metastasis	Rectum	IV	Xenograft	Validation
Hx218	56	F	Liver metastasis	Left	IV	Xenograft	Validation
Hx219	69	M	Liver metastasis	Cecum	IV	Xenograft	Validation
Hx220	83	F	Liver metastasis	Right	IV	Xenograft	Validation
Hx223	45	F	Liver metastasis	Rectosigmoid	IV	Xenograft	Validation

**Table S2B.** Characteristics of the breast cancer samples

ID	Patient age (years)	Adenocarcinoma Type	Tissue derivation	Stage	ER status <sup>#</sup>	PR status <sup>#</sup>	Her-2/neu status <sup>*</sup>	Sample type	Screen
HCC1008	67	Ductal	Lymph node	IIA	-	-	+++	Cell line	Discovery
HCC1954	61	Ductal	Primary breast tumor	IIA	-	-	N/A	Cell line	Discovery
HCC38	50	Ductal	Primary breast tumor	IIB	-	-	-	Cell line	Discovery
HCC1143	52	Ductal	Primary breast tumor	IIA	-	-	-	Cell line	Discovery
HCC1187	41	Ductal	Primary breast tumor	IIA	-	-	-	Cell line	Discovery
HCC1395	43	Ductal	Primary breast tumor	I	-	-	-	Cell line	Discovery
HCC1599	44	Ductal	Primary breast tumor	IIIA	-	-	-	Cell line	Discovery
HCC1937	24	Ductal	Primary breast tumor	IIB	-	-	-	Cell line	Discovery
HCC2157	48	Ductal	Primary breast tumor	IIIA	-	+	++	Cell line	Discovery
HCC2218	38	Ductal	Primary breast tumor	IIIA	-	-	+++	Cell line	Discovery
Hs578T	74	Carcinosarcoma	Primary breast tumor	N/A	-	-	+	Cell line	Discovery
HCC2713	35	Ductal	Primary breast tumor	I	-	N/A	++	Cell line	Validation
BB1T	51	Ductal	Primary breast tumor	IIIC	-	-	-	Microdissected tumor tissue	Validation
BB2T	51	Ductal	Primary breast tumor	IIA	-	-	++	Microdissected tumor tissue	Validation
BB3T	56	Ductal	Primary breast tumor	IIA	+	+	+++	Microdissected tumor tissue	Validation
BB4T	52	Lobular	Primary breast tumor	IIIA	+	+	++	Microdissected tumor tissue	Validation
BB5T	42	Ductal	Primary breast tumor	IIIA	+	+	-	Microdissected tumor tissue	Validation
BB7T	59	Ductal	Primary breast tumor	IIA	+	+	+++	Microdissected tumor tissue	Validation
BB9T	47	Ductal	Primary breast tumor	IIA	+	+	+++	Microdissected tumor tissue	Validation
BB10T	55	Ductal	Primary breast tumor	IIB	+	+	+	Microdissected tumor tissue	Validation
BB12T	58	Ductal	Primary breast tumor	IIIA	-	-	+	Microdissected tumor tissue	Validation
BB13T	63	Ductal	Primary breast tumor	IIIC	-	-	-	Microdissected tumor tissue	Validation
BB14T	74	Ductal	Primary breast tumor	IIA	+	+	-	Microdissected tumor tissue	Validation
BB15T	79	Ductal	Primary breast tumor	IIB	+	+	+	Microdissected tumor tissue	Validation
BB16T	40	Ductal	Primary breast tumor	IIB	+	+	+	Microdissected tumor tissue	Validation
BB18T	53	Ductal	Primary breast tumor	IIA	+	+	-	Microdissected tumor tissue	Validation
BB20T	83	Ductal	Primary breast tumor	IIA	+	+	-	Microdissected tumor tissue	Validation
BB21T	77	Ductal	Primary breast tumor	IIIA	+	+	-	Microdissected tumor tissue	Validation
BB22T	50	Ductal	Primary breast tumor	IIIC	+	+	+	Microdissected tumor tissue	Validation
BB23T	46	Ductolubular	Primary breast tumor	IIIC	+	-	-	Microdissected tumor tissue	Validation
BB24T	66	Ductal	Primary breast tumor	IIA	-	-	+	Microdissected tumor tissue	Validation
BB27T	46	Ductal	Primary breast tumor	IIIA	+	-	-	Microdissected tumor tissue	Validation
BB28T	47	Ductal	Primary breast tumor	IIIA	-	+	-	Microdissected tumor tissue	Validation
BB29T	54	Ductal	Primary breast tumor	IIA	+	-	-	Microdissected tumor tissue	Validation
BB30T	50	Ductal	Primary breast tumor	IIB	-	-	+	Microdissected tumor tissue	Validation
BB31T	56	Ductal	Primary breast tumor	IIIA	-	-	-	Microdissected tumor tissue	Validation
BB32T	52	Ductal	Primary breast tumor	IIA	+	-	+	Microdissected tumor tissue	Validation
BB33T	36	Ductal	Primary breast tumor	IV	+	+	++	Microdissected tumor tissue	Validation
BB34T	36	Ductolubular	Primary breast tumor	IIA	+	+	+++	Microdissected tumor tissue	Validation
BB35T	67	Ductal	Primary breast tumor	IV	+	+	N/A	Microdissected tumor tissue	Validation
BB36T	60	Ductal	Primary breast tumor	IIB	-	-	++	Microdissected tumor tissue	Validation
BB37T	47	Ductal	Primary breast tumor	IIA	+	-	-	Microdissected tumor tissue	Validation
BB38T	39	Ductal	Primary breast tumor	IIB	+	+	++	Microdissected tumor tissue	Validation
BB39T	39	Lobular	Primary breast tumor	IIB	+	-	+++	Microdissected tumor tissue	Validation
BB40T	43	Ductal	Primary breast tumor	IIA	+	-	-	Microdissected tumor tissue	Validation
BB42T	56	Ductal	Primary breast tumor	IIB	-	-	-	Microdissected tumor tissue	Validation
BB43T	54	Ductolubular	Primary breast tumor	IIIA	+	+	+++	Microdissected tumor tissue	Validation
BB44T	46	Ductolubular	Primary breast tumor	I	+	+	+	Microdissected tumor tissue	Validation

<sup>#</sup>Estrogen receptor (ER) and progesterone receptor (PR) status as determined by immunohistochemistry, -, negative; +, positive; ++, moderately positive or +++ strongly positive; N/A, data not available.