

Supplementary materials

Table S1: The clinicopathological parameters of 180 CRC cases of the tissue microarray used for immunohistochemistry analysis.

^aThe tissue microarrays of colorectal cancer (HCol-Ade180Sur-04 and HCol-Ade180Sur-08) are purchased from Shanghai Outdo Biotech, China.

^bThe positivity values are calculated using positive pixel count algorithm v 9.1 in Aperio ImageScope v12.1. The missing values are those spots lacking available areas. Epi, epithelial; Str, stromal. X-Tile v 3.6.1 was used to determine the cutoff to dichotomize into low (blue) and high (red) expression group for survival analysis. For clinicopathological parameter analysis, the cases were simply divided into lower-than-median and higher-than-median groups.

Chip	Tissue code ^a	Surgery time	Survival status	Follow-up time	Survival time (Month)	Loss to follow up	Sex	Age	Distant metastasis	Grade	Tumor size	Tumor size (cm ³)	Positive lymph node	T	N	M	AJCC 7th stage	Cancer tissue ^b			Matched normal tissue ^b		
																		Full tissue spot	Epi cells	Str cells	Full tissue spot	Epi cells	Str cells
HCol-Ade180Sur-04	RDgCol0609A0294	2006.9	Dead	2008/3/3	18		M	48	No	II-III	5.5x4x2cm	44	6	T3	N2a	M0	3B	0.2653	0.65	0.09	0.425	0.42	0.38
HCol-Ade180Sur-04	RDgCol0706A0586	2007.5	Alive	2015.7	98		F	63	No	II	4.5x4x1cm	18	2	T3	N1b	M0	3B	0.1739	n/a	0.13	0.196	0.12	0.32
HCol-Ade180Sur-04	RDgCol0609A0283	2006.8	Dead	2006/11/30	3		F	73	Peritoneum	II-III	5x3.5x3cm	52.5	3	T3	N1b	M1t	4B	0.2623	0.88	0.17	0.657	0.66	0.57
HCol-Ade180Sur-08	RDgCol0710A0665	2007.8	Alive	2015.7	95		F	72	No	II	4x4x1.5cm	24	0	T3	N0	M0	2A	0.1865	0.23	0.19	0.283	0.3	0.5
HCol-Ade180Sur-04	RDgCol0701A0405	2007.1	Dead	2008/1/7	12		F	62	No	III	10x10x9cm	900	10	T3	N2b	M0	3C	0.4389	0.54	0.2	0.215	0.21	0.36
HCol-Ade180Sur-04	RDgCol0705A0525	2007.4	Alive	2015.7	99		F	57	No	II-III	4.5x3x1cm	13.5	1	T3	N1a	M0	3B	0.3826	0.76	0.21	0.212	0.26	0.49
HCol-Ade180Sur-04	RDgCol0609A0278	2006.7	Dead	2009/11/19	40		M	75	No	II-III	2.5x2.5x1cm	6.25		T4b	N0	M0	2C	0.2224	n/a	0.22	0.527	0.53	0.68
HCol-Ade180Sur-04	RDgCol0706A0606	2007.5	Alive	2015.7	98		F	74	No	II	6.5x6x4.5cm	175.5	0	T2	N0	M0	1	0.2929	0.66	0.22	0.346	0.25	0.43
HCol-Ade180Sur-04	RDgCol0704A0460	2007.3	Dead	2012/5/23	62		M	80	No	II	8x5x5cm	200	0	T3	N0	M0	2A	0.2909	0.55	0.25	0.436	0.27	0.54
HCol-Ade180Sur-04	RDgCol0704A0439	2007.2	Alive	2015.7	101		M	63	No	II	9x8x8cm	576	0	T3	N0	M0	2A	0.2406	0.75	0.25	0.487	0.64	0.5
HCol-Ade180Sur-04	RDgCol0704A0465	2007.3	Dead	2010/4/22	37		M	72	No	II	10x10x8.2cm	820	1	T3	N1a	M0	3B	0.3756	0.76	0.25	0.351	0.21	0.51
HCol-Ade180Sur-04	RDgCol0704A0431	2007.1	Dead	2011/3/9	50		M	62	No	II	1-4x3x3cm	22.5	0	T3	N0	M0	2A	0.4828	0.43	0.27	0.19	0.19	0.37
HCol-Ade180Sur-08	RDgCol0802A0937	2008.1	Dead	2011/1/25	36		F	67	No	I-II	4x4x1.3cm	20.8	0	T3	N0	M0	2A	0.5907	0.73	0.28	n/a	0.03	0.13
HCol-Ade180Sur-04	RDgCol0704A0442	2007.2	Dead	2012/12/17	70		M	89	No	II-III	15x13x11cm	2145	0	T3	N0	M0	2A	0.3649	0.54	0.28	0.453	0.58	0.6
HCol-Ade180Sur-08	RDgCol0710A0679	2007.9	Alive	2015.7	94		M	62	No	II-III	6x5x1.5cm	45	0	T3	N0	M0	2A	0.3547	0.47	0.29	0.366	0.41	0.49
HCol-Ade180Sur-08	RDgCol0706A0616	2007.6	Dead	2008/1/22	7		F	74	No	II-III	10x5x1.5cm	75	5	T3	N2a	M0	3B	0.36	0.45	0.29	0.226	0.2	0.39
HCol-Ade180Sur-08	RDgCol0804A0983	2008.3	Dead	2010/11/23	32		F	71	No	II	2.5x2.5x1cm	6.25	0	T3	N0	M0	2A	0.4855	0.61	0.29	0.398	0.26	0.14

HCol-Ade180Sur-08	RDgCol07 10A0667	2007.8 Alive	2015.7	95		M	65	No	II	4x3x1.5cm	18	2	T4a N1b M0 3B	0.4339	0.59	0.3	0.325	0.35	0.46
HCol-Ade180Sur-04	RDgCol07 04A0475	2007.2 Dead	2010/2/14	36		M	90	No	II-III	5x4x1cm	20	0	T3 N0 M0 2A	0.3018	n/a	0.3	0.217	0.21	0.58
HCol-Ade180Sur-04	RDgCol07 06A0607	2007.5 Alive	2015.7	98		M	66	No	II-III	—	—	0	T3 N0 M0 2A	0.457	0.5	0.31	0.214	0.2	0.5
HCol-Ade180Sur-04	RDgCol07 04A0441	2007.2 Dead	2008/6/26	16		F	79	No	II	6x6x5cm	180	2	T4b N1b M0 3C	0.5778	0.79	0.33	0.645	0.8	0.64
HCol-Ade180Sur-08	RDgCol08 01A0885	2007-1 Alive	2014.5	78	2013	F	79	No	I-III	4x3x1.5cm	18	0	T3 N0 M0 2A	0.2873	0.35	0.33	0.375	0.4	0.51
HCol-Ade180Sur-04	RDgCol07 06A0597	2007.5 Alive	2015.7	98		F	58	No	II-III	3.5x3x1cm	10.5	2	T3 N1b M0 3B	0.5444	0.95	0.34	0.378	0.34	0.53
HCol-Ade180Sur-04	RDgCol06 09A0284	2006.8 Alive	2015.7	107		M	71	No	II	6x4x1.5cm	36		T3 N0 M0 2A	0.5621	0.69	0.35	0.299	0.3	0.46
HCol-Ade180Sur-04	RDgCol07 04A0438	2007.1 Alive	2015.7	102		F	70	No	II	7x7x4cm	196	2	T3 N1b M0 3B	0.4394	0.55	0.35	0.259	0.3	0.32
HCol-Ade180Sur-04	RDgCol07 06A0609	2007.5 Dead	2008/7/29	14		M	62	No	II-III	6x5x1.3cm	39	4	T3 N2a M0 3B	0.4941	0.58	0.35	0	0.69	0.28
HCol-Ade180Sur-04	RDgCol07 06A0575	2007.4 Alive	2015.7	99		M	62	No	II	2.3x2x 0.5cm	2.3	0	T2 N0 M0 1	0.4587	0.52	0.36	0.427	0.55	0.52
HCol-Ade180Sur-04	RDgCol07 04A0453	2007.3 Dead	2008/5/29	14		F	84	No	II-III	6x5x5cm	150	1	T3 N1a M0 3B	0.4457	0.82	0.36	0.489	0.3	0.62
HCol-Ade180Sur-08	RDgCol08 03A0955	2008.3 Alive	2015.7	88		F	54	No	II	3.3x2.7x 1cm	8.91	0	T2 N0 M0 1	0.2949	0.34	0.36	n/a	n/a	n/a
HCol-Ade180Sur-04	RDgCol07 05A0535	2007.4 Alive	2015.7	99		M	74	No	II	5x4x1.5cm	30	0	T3 N0 M0 2A	0.374	0.47	0.37	0.294	0.28	0.42
HCol-Ade180Sur-04	RDgCol06 09A0296	2006.9 Dead	2011/4/12	55		M	80	No	II	4x3x1.5, 2x 1.7x1cm	21.4		T3 N0 M0 2A	0.5788	0.72	0.37	0	0	0.14
HCol-Ade180Sur-04	RDgCol07 04A0436	2007.1 Alive	2015.7	102		F	成	No	II-III	3.5x2x2cm	14	0	T3 N0 M0 2A	0.399	0.38	0.38	0.243	0.24	0.39
HCol-Ade180Sur-08	RDgCol07 09A0652	2007.7 Alive	2015.7	96		M	80	No	I-II	4.5x4x 1.5cm	27	0	T3 N0 M0 2A	0.5128	0.67	0.38	0.33	0.37	0.42
HCol-Ade180Sur-08	RDgCol07 10A0668	2007.8 Alive	2015.7	95		M	61	No	I-II	7x5x1.5cm	52.5	0	T4a N0 M0 2B	0.4223	0.54	0.38	0.314	0.34	0.44
HCol-Ade180Sur-08	RDgCol08 01A0891	2008.1 Dead	2009/5/4	16		F	52	No	III	9x6x1.5cm	81	4	T3 N2a M0 3B	0.5286	0.69	0.38	0.369	0.43	0.46
HCol-Ade180Sur-08	RDgCol07 10A0672	2007.9 Alive	2015.7	94		F	55	No	II	3x2x1.8cm	10.8	0	T3 N0 M0 2A	0.4234	0.58	0.39	0.269	0.27	0.49
HCol-Ade180Sur-04	RDgCol07 06A0592	2007.5 Alive	2015.7	98		F	70	No	II	2.2x2x1cm	4.4	0	T3 N0 M0 2A	0.4055	0.79	0.39	0.631	0.82	0.66
HCol-Ade180Sur-08	RDgCol07 12A0828	2007-1 Dead	2011/7/12	44		M	72	No	I-II	6x3x1cm	18	1	T3 N1a M0 3B	0.5612	0.72	0.39	n/a	n/a	0.18
HCol-Ade180Sur-08	RDgCol08 01A0880	2007-1 Alive	2015.7	91		M	72	No	II	3x2.5x 1.8cm	13.5	0	T1 N0 M0 1	0.5347	0.67	0.39	0.273	0.27	0.41
HCol-Ade180Sur-04	RDgCol07 05A0531	2007.4 Alive	2015.7	99		M	80	No	III	10x6x1cm	60	2	T3 N1b M0 3B	0.4699	0.63	0.39	0.316	0.3	0.45
HCol-Ade180Sur-08	RDgCol08 03A0962	2008.3 Dead	2013/9/23	66		F	62	No	II	5x3.5x1cm	17.5	0	T3 N0 M0 2A	0.5411	0.68	0.39	0.278	0.28	0.4

HCol-Ade180Sur-08	RDgCol07 12A0827	2007-1 Alive	2015.7	92	F	86	No	II	6x4.5x 1.5cm	40.5	0	T3 N0 M0 2A	0.4213	0.54	0.4	0.358	0.39	0.47	
HCol-Ade180Sur-04	RDgCol06 11A0310	2006.9 Dead	2007/2/19	5	F	73	No	III	6x5x3cm	90	6	T3 N2a M0 3B	0.4917	0.81	0.4	0.398	0.4	0.43	
HCol-Ade180Sur-04	RDgCol06 11A0312	2006.9 Alive	2015.7	106	M	80	No	II-III	5x4.5x1cm	22.5	0	T3 N0 M0 2A	0.4614	0.45	0.4	0.37	0.37	0.42	
HCol-Ade180Sur-08	RDgCol08 03A0967	2008.3 Dead	2011/3/1	36	F	65	No	II	5x5x1.5cm	37.5	4	T3 N2a M0 3B	0.464	0.59	0.4	0.401	0.43	0.54	
HCol-Ade180Sur-04	RDgCol07 04A0466	2007.3 Alive	2015.7	100	M	62	No	II	6x6x3cm	108	0	T3 N0 M0 2A	0.4325	0.56	0.4	0.308	0.57	0.6	
HCol-Ade180Sur-04	RDgCol07 06A0585	2007.5 Alive	2015.7	98	M	47	No	I	3x2x1.5cm	9	0	T1 N0 M0 1	0.3481	0.43	0.4	0.421	0.33	0.61	
HCol-Ade180Sur-08	RDgCol07 06A0619	2007.6 Alive	2015.7	97	M	62	No	I-II	7x6x1.5cm	63	0	T3 N0 M0 2A	0.5299	0.7	0.4	0.29	0.32	0.43	
HCol-Ade180Sur-08	RDgCol07 10A0675	2007.9 Alive	2015.7	94	M	85	No	II	7x3x1.5cm	31.5	1	T3 N1a M0 3B	0.5903	0.75	0.41	0.389	0.4	0.58	
HCol-Ade180Sur-08	RDgCol07 12A0835	2007-1 Alive	2015.7	91	M	51	No	II	2x1.5x1cm	3	1	T3 N1a M0 3B	0.442	0.57	0.41	0.301	0.34	0.4	
HCol-Ade180Sur-08	RDgCol08 03A0953	2008.3 Dead	2011/5/31	38	M	65	No	I	6x5x2cm	60	0	T4b N0 M0 2C	0.6185	0.77	0.41	0.344	0.38	0.55	
HCol-Ade180Sur-08	RDgCol07 06A0617	2007.6 Dead	2008/8/24	14	F	81	No	II	4.5x4x 1.5cm	27	0	T3 N0 M0 2A	0.4707	0.57	0.41	0.402	0.43	0.55	
HCol-Ade180Sur-08	RDgCol07 12A0829	2007-1 Dead	2010/4/14	29	M	65	No	II	7x5x2cm	70	1	T4a N1a M0 3B	0.5602	0.69	0.41	0.351	0.37	0.48	
HCol-Ade180Sur-08	RDgCol07 09A0646	2007.7 Dead	2011/2/6	43	M	57	No	II	6x3x1cm	18	0	T3 N0 M0 2A	0.4848	0.61	0.42	0.394	0.42	0.52	
HCol-Ade180Sur-08	RDgCol07 12A0825	2007-1 Alive	2015.7	92	M	51	No	I-II	5x5x1cm	25	0	T3 N0 M0 2A	0.481	0.6	0.42	0.296	0.3	0.41	
HCol-Ade180Sur-04	RDgCol07 04A0435	2007.1 Dead	2008/5/14	16	M	成	No	II-III	5.5x4.5x 3.5cm	86.63	0	T3 N0 M0 2A	0.6719	0.73	0.43	0.178	0.12	0.3	
HCol-Ade180Sur-08	RDgCol07 06A0615	2007.6 Dead	2010/2/18	32	F	78	No	II	6x5x1.5cm	45	0	T4a N0 M0 2B	0.588	0.71	0.43	0.3	0.31	0.37	
HCol-Ade180Sur-04	RDgCol07 05A0539	2007.4 Dead	2008/7/25	15	F	71	No	II-III	5x4x1.3cm, 5x3.5x1cm 15x10x	43.5	4	T3 N2a M0 3B	0.6191	0.88	0.43	0.24	0.34	0.53	
HCol-Ade180Sur-04	RDgCol07 04A0452	2007.3 Dead	2008/1/22	10	F	67	No	II	10cm, 2x2x 1.5cm	1506	1	T4a N1a M0 3B	0.5465	0.91	0.43	0.41	0.49	0.47	
HCol-Ade180Sur-08	RDgCol08 03A0960	2008.3 Alive	2015.7	88	F	54	No	I-II	3x3x0.8cm	7.2	3	T3 N1b M0 3B	0.5959	0.75	0.43	0.337	0.39	0.47	
HCol-Ade180Sur-04	RDgCol06 09A0295	2006.9 Dead	2010/12/5	51	F	24	No	II-III	3.5x3x1cm	10.5	4	T3 N2a M0 3B	0.4313	0.5	0.43	0.531	0.53	0.53	
HCol-Ade180Sur-08	RDgCol08 04A0989	2008.4 Dead	2008/8/1	4	F	76	No	III	6x4.5x1cm	27	2	T3 N1b M0 3B	0.5306	0.67	0.43	0.379	0.35	0.54	
HCol-Ade180Sur-04	RDgCol06 09A0297	2006.9 Dead	2008/9/30	24	M	75	No	II	7x6x2cm	84	2	T4a N1b M0 3B	0.4426	0.41	0.43	0.383	0.38	0.42	
HCol-Ade180Sur-04	RDgCol07 05A0534	2007.4 Alive	2012/8/16	64	2013	F	60	No	II	4x2x1.3cm	10.4	2	T3 N1b M0 3B	0.4599	0.68	0.43	0.299	0.54	0.5

HCol-Ade180Sur-08	RDgCol0803A0963	2008.3 Alive	2015.7	88	M	74	No	II	5x4.5x1.5cm	33.75	1	T3 N1aM0 3B	0.5666	0.7	0.44	0.355	0.38	0.5	
HCol-Ade180Sur-04	RDgCol0609A0287	2006.8 Alive	2015.7	107	M	55	No	II-III	7.5x4.5x2.5cm	84.38		T3 N0 M0 2A	0.7061	0.77	0.44	0.339	0.34	0.47	
HCol-Ade180Sur-08	RDgCol0712A0830	2007-1 Dead	2008/10/4	11	M	80	No	II	5x4x1.5cm	30	3	T3 N1bM0 3B	0.4096	0.52	0.44	0.286	0.3	0.49	
HCol-Ade180Sur-04	RDgCol0704A0451	2007.3 Alive	2012/8/16	65	2013	F	68	No	III	3.5x3x2cm	21	0	T3 N0 M0 2A	0.6062	0.89	0.44	0.257	0.17	0.33
HCol-Ade180Sur-04	RDgCol0704A0457	2007.3 Alive	2012/8/16	65	2013	M	65	No	II	4.5x4x1cm	18	0	T3 N0 M0 2A	0.3493	0.24	0.44	0.403	0.54	0.44
HCol-Ade180Sur-08	RDgCol0711A0781	2007-1 Alive	2015.7	92	M	75	No	II	4x4x1cm	16	0	T4a N0 M0 2B	0.5815	0.74	0.45	n/a	n/a	n/a	
HCol-Ade180Sur-08	RDgCol0710A0673	2007.9 Alive	2015.7	94	M	68	No	II	3.5x3x1cm	10.5	0	T2 N0 M0 1	0.54	0.66	0.45	0.368	0.36	n/a	
HCol-Ade180Sur-04	RDgCol0609A0298	2006.9 Alive	2015.7	106	F	59	No	II-III	4.5x3x1.5cm	20.25	0	T3 N0 M0 2A	0.4363	0.45	0.45	0.207	0.21	0.35	
HCol-Ade180Sur-08	RDgCol0801A0890	2008.1 Dead	2009/2/24	13	M	65	No	II-III	6x4.5x1.5cm	40.5	1	T3 N1aM0 3B	0.339	0.4	0.45	0.339	0.39	0.48	
HCol-Ade180Sur-08	RDgCol0802A0943	2008.2 Dead	2009/12/13	22	M	60	No	II	5x4x1cm	20	1	T3 N1aM0 3B	0.5024	0.59	0.45	n/a	n/a	0.03	
HCol-Ade180Sur-08	RDgCol0710A0676	2007.9 Alive	2015.7	94	F	63	No	II	6x4x1.5cm	36	0	T3 N0 M0 2A	0.5691	0.72	0.45	0.379	0.41	n/a	
HCol-Ade180Sur-08	RDgCol0710A0671	2007.9 Dead	2010/12/1	39	M	67	No	II	5x4x1cm	20	0	T3 N0 M0 2A	0.5258	0.67	0.45	0.369	0.4	0.48	
HCol-Ade180Sur-08	RDgCol0709A0654	2007.8 Dead	2009/12/12	28	F	73	No	II	3x2x1cm	6	0	T3 N1cM0 3B	0.5371	0.67	0.45	0.295	0.31	0.5	
HCol-Ade180Sur-04	RDgCol0705A0530	2007.4 Alive	2015.7	99	F	84	No	II	2x2x1.5cm	6	0	T2 N0 M0 1	0.6377	0.71	0.45	0.356	0.4	0.45	
HCol-Ade180Sur-04	RDgCol0609A0285	2006.8 Dead	2011/3/23	55	F	70	No	II-III	5.5x4.5x0.7cm	17.33	1	T3 N1aM0 3B	0.5364	0.87	0.45	0.252	0.25	0.38	
HCol-Ade180Sur-04	RDgCol0705A0532	2007.4 Alive	2015.7	99	F	65	No	II	5.5x4x1cm	22	0	T3 N0 M0 2A	0.4537	0.49	0.46	0.302	0.36	0.55	
HCol-Ade180Sur-08	RDgCol0712A0834	2007-1 Alive	2015.7	91	M	78	No	II	①4.5x3.5x1cm; ②1.5x0.8x0.8cm	16.71	0	T3 N0 M0 2A	0.5846	0.74	0.46	n/a	0.06	0.09	
HCol-Ade180Sur-08	RDgCol0711A0775	2007-1 Dead	2009/2/16	16	M	62	No	II	9x3x3cm	81	3	T3 N1bM0 3B	0.5017	0.61	0.46	0.299	0.3	0.45	
HCol-Ade180Sur-04	RDgCol0705A0543	2007.4 Dead	2010/2/25	34	F	63	No	II	3.5x3x1.5cm	15.75	1	T3 N1aM0 3B	0.4615	n/a	0.46	0.351	0.33	0.63	
HCol-Ade180Sur-08	RDgCol0804A0974	2008.3 Alive	2015.7	88	M	75	No	II	3x3x1cm	9	1	T3 N1aM0 3B	0.4859	0.59	0.46	0.361	0.39	0.53	
HCol-Ade180Sur-08	RDgCol0709A0641	2007.6 Dead	2011/6/25	47	M	74	No	II	4.5x3x1.5cm	20.25	0	T3 N0 M0 2A	0.5732	0.73	0.46	0.333	0.36	0.45	
HCol-Ade180Sur-08	RDgCol0709A0655	2007.8 Alive	2015.7	95	F	47	No	II	9x4.5x1.5cm	60.75	7	T3 N2bM0 3C	0.4991	0.61	0.46	n/a	0.17	n/a	
HCol-Ade180Sur-08	RDgCol0804A0977	2008.3 Alive	2015.7	88	M	70	No	I	4.5x3x1cm	13.5	0	T3 N0 M0 2A	0.6045	0.75	0.47	0.446	0.48	0.6	

HCol-Ade180Sur-08	RDgCol0801A0888	2008.1 Dead	2015/6/12	89	M	71	No	I-III	5x5x0.5cm	12.5	4	T3 N2a M0 3B	0.6147	0.76	0.47	0.383	0.41	0.54
HCol-Ade180Sur-04	RDgCol0704A0463	2007.3 Dead	2010/11/2	44	M	67	No	II-III	3.5x3x2cm	21	3	T3 N1b M0 3B	0.6331	0.69	0.47	0.415	0.45	0.54
HCol-Ade180Sur-08	RDgCol0801A0881	2007-1 Dead	2009/1/9	13	F	72	No	II	4x3.5x2.5cm	35		T3 N0 M0 2A	0.5408	0.69	0.47	0.37	0.41	0.49
HCol-Ade180Sur-04	RDgCol0705A0533	2007.4 Dead	2010/2/5	34	F	76	No	II	8x4.5x2cm	72	0	T3 N0 M0 2A	0.5045	0.59	0.47	0.357	0.65	0.57
HCol-Ade180Sur-04	RDgCol0706A0579	2007.5 Dead	2007/11/29	6	F	73	No	II	5x4x1.3cm	26	0	T3 N1c M0 3B	0.5698	0.81	0.47	0.444	0.46	0.63
HCol-Ade180Sur-08	RDgCol0803A0956	2008.3 Alive	2015.7	88	F	79	No	I-III	5x4x1.5cm	30	0	T3 N0 M0 2A	0.4932	0.6	0.48	0.367	0.42	0.51
HCol-Ade180Sur-08	RDgCol0709A0649	2007.7 Dead	2009/10/30	27	F	50	No	II-III	2.5x2x1cm	5	4	T4a N2a M0 3C	0.4732	0.56	0.48	0.286	0.27	0.47
HCol-Ade180Sur-08	RDgCol0712A0833	2007-1 Dead	2010/7/24	31	F	60	No	II	4x3x3cm	36	0	T3 N0 M0 2A	0.5374	0.72	0.48	0.425	0.46	0.56
HCol-Ade180Sur-08	RDgCol0706A0628	2007.6 Alive	2015.7	97	M	53	No	II	5x5x1cm	25	1	T3 N1a M0 3B	0.4815	0.58	0.48	0.247	0.05	0.37
HCol-Ade180Sur-08	RDgCol0706A0627	2007.6 Dead	2008/3/20	9	F	54	No	I-II	4x3x1cm	12	0	T3 N0 M0 2A	0.5677	0.7	0.48	0.328	0.34	0.55
HCol-Ade180Sur-04	RDgCol0609A0292	2006.9 Alive	2015.7	106	M	85	No	II-III	4x4x2.5cm	40	0	— N0 M0 —	0.3633	0.36	0.48	0.268	0.27	0.41
HCol-Ade180Sur-04	RDgCol0705A0544	2007.4 Alive	2015.7	99	M	58	No	I-II	5x5x1.5cm	37.5	0	T3 N0 M0 2A	0.486	0.5	0.49	0.278	0.23	0.36
HCol-Ade180Sur-08	RDgCol0803A0952	2008.3 Alive	2015.7	88	F	64	No	II	3.5x2.7x1cm	9.45	0	T3 N0 M0 2A	0.5943	0.72	0.49	n/a	0.02	n/a
HCol-Ade180Sur-04	RDgCol0704A0447	2007.2 Dead	2011/6/26	52	F	80	No	II	4x4x1.5cm	24	0	T3 N0 M0 2A	0.7521	0.87	0.49	0	0.51	0.44
HCol-Ade180Sur-08	RDgCol0709A0656	2007.8 Alive	2015.7	95	M	68	No	I	4x6x5cm	120	0	T3 N0 M0 2A	0.374	0.42	0.49	0.419	0.45	0.57
HCol-Ade180Sur-04	RDgCol0705A0541	2007.4 Dead	2009/4/19	24	F	67	No	II-III	4x3x1.5cm	18	2	T3 N1b M0 3B	0.4212	0.75	0.49	0.34	0.45	0.57
HCol-Ade180Sur-08	RDgCol0803A0954	2008.3 Dead	2009/9/29	18	M	83	No	II	10x7x1.5cm	105	2	T4a N1b M0 3B	0.5922	0.74	0.49	0.345	0.31	0.43
HCol-Ade180Sur-08	RDgCol0709A0642	2007.7 Alive	2015.7	96	F	70	No	I-II	9x6x1cm	54	0	T3 N0 M0 2A	0.52	0.63	0.49	0.421	0.44	0.58
HCol-Ade180Sur-04	RDgCol0704A0476	2007.2 Dead	2007/7/15	5	M	48	No	III	8x7x3cm	168	0	T4b N0 M0 2C	0.5426	0.66	0.49	0.486	0.56	0.5
HCol-Ade180Sur-08	RDgCol0803A0957	2008.3 Alive	2015.7	88	F	60	No	II	6x3.5x1.5cm	31.5	0	T3 N0 M0 2A	0.4914	0.59	0.49	0.3	0.29	0.47
HCol-Ade180Sur-04	RDgCol0704A0461	2007.3 Alive	2015.7	100	F	79	No	II	3x3x2cm	18	2	T3 N1b M0 3B	0.4775	0.5	0.5	0.306	0.17	0.42
HCol-Ade180Sur-08	RDgCol0803A0959	2008.3 Alive	2015.7	88	F	50	No	I-II	3x2.5x1cm	7.5	1	T3 N1a M0 3B	0.5531	0.69	0.5	0.209	0.23	0.34
HCol-Ade180Sur-04	RDgCol0706A0589	2007.5 Dead	2008/8/6	15	M	63	No	II	7.5x5.5x2cm	82.5	0	T3 N0 M0 2A	0.6162	0.66	0.5	0.241	0.22	0.47
HCol-Ade180Sur-04	RDgCol0705A0524	2007.3 Alive	2015.7	100	F	82	No	I	9x5.5x3cm	148.5	0	T2 N0 M0 1	0.539	0.71	0.5	0.259	0.34	0.44

HCol-Ade180Sur-08	RDgCol07 11A0782	2007.1 Dead	2014/2/3	75		M	70	No	II	6.5x4.5x 1.5cm	43.88	0	T2 N0 M0 1	0.4587	0.55	0.5	0.345	0.35	0.5
HCol-Ade180Sur-04	RDgCol07 04A0440	2007.2 Dead	2008/10/6	20		M	74	No	II	15x13x 11cm	2145	1	T2 N1aM0 3A	0.5395	0.66	0.5	0.251	0.3	0.4
HCol-Ade180Sur-08	RDgCol07 06A0622	2007.6 Alive	2015.7	97		M	76	No	II	5x4x1cm	20	0	T4a N0 M0 2B	0.569	0.71	0.5	0.426	0.46	0.57
HCol-Ade180Sur-04	RDgCol07 06A0584	2007.5 Alive	2015.7	98		M	55	No	I-II	6x5x1.5cm	45	0	T3 N0 M0 2A	0.699	0.91	0.5	0.221	0.15	0.5
HCol-Ade180Sur-04	RDgCol07 04A0449	2007.1 Alive	2012/8/16	67	2013	M	78	No	II	2-1.2x1.5x 1.5cm	3.6		T4a N0 M0 2B	0.5909	0.79	0.5	0.176	0.14	0.35
HCol-Ade180Sur-08	RDgCol07 06A0624	2007.6 Dead	2010/10/9	40		F	60	No	I-II	7x6x4cm	168	0	T3 N0 M0 2A	0.6105	0.75	0.5	0.434	0.47	0.56
HCol-Ade180Sur-08	RDgCol07 09A0645	2007.7 Dead	2015/2/3	91		F	76	No	II	4x2x0.6cm	4.8	0	T3 N0 M0 2A	0.57	0.7	0.51	0.329	0.36	0.48
HCol-Ade180Sur-04	RDgCol07 04A0437	2007.1 Dead	2008/7/10	18		F	71	No	II-III	7x7x4cm	196	0	T2 N0 M0 1	0.7146	0.92	0.51	0.516	0.7	0.52
HCol-Ade180Sur-08	RDgCol08 02A0945	2008.2 Alive	2015.7	89		F	69	No	II	2.8x2.5x 1cm	7	0	T4b N0 M0 2C	0.4916	0.59	0.52	0.336	0.36	0.48
HCol-Ade180Sur-08	RDgCol07 11A0777	2007-1 Alive	2015.7	93		M	75	No	II	5x5x4cm	100	0	T3 N0 M0 2A	0.5652	0.74	0.52	0.345	0.35	0.47
HCol-Ade180Sur-08	RDgCol07 10A0663	2007-9 Dead	2009/1/15	16		F	78	No	II	4x3x1.5cm	18	0	T3 N0 M0 2A	0.4589	0.72	0.52	0.337	0.38	0.43
HCol-Ade180Sur-08	RDgCol07 09A0640	2007.6 Alive	2015.7	97		M	74	No	II	5x4x1cm	20	0	T3 N0 M0 2A	0.5708	0.7	0.52	0.364	0.36	0.52
HCol-Ade180Sur-08	RDgCol07 09A0648	2007.7 Alive	2015.7	96		M	65	No	II-III	9x6x1.5cm	81	0	T3 N0 M0 2A	0.5803	0.73	0.52	0.352	0.38	0.51
HCol-Ade180Sur-08	RDgCol07 11A0779	2007-1 Dead	2008/3/27	5		F	83	No	II-III	5x4.5x2cm	45	0	T3 N0 M0 2A	0.6276	0.77	0.52	0.422	0.48	0.55
HCol-Ade180Sur-08	RDgCol07 11A0778	2007-1 Alive	2015.7	93		M	58	No	II	4x3x1cm	12	1	T3 N1aM0 3B	0.6124	0.74	0.53	0.334	0.35	0.49
HCol-Ade180Sur-08	RDgCol07 10A0681	2007.9 Alive	2015.7	94		F	78	No	II	3.5x2x1cm	7	0	T3 N0 M0 2A	0.5305	0.66	0.53	0.335	0.37	0.45
HCol-Ade180Sur-08	RDgCol07 06A0626	2007.6 Alive	2015.7	97		M	61	No	II	6x4.5x 1.5cm	40.5	1	T3 N1aM0 3B	0.5999	0.75	0.53	0.35	0.39	0.5
HCol-Ade180Sur-08	RDgCol07 09A0653	2007.7 Dead	2007/9/11	2		F	70	No	II	5x4.5x 1.5cm	33.75	4	T3 N2aM0 3B	0.6239	0.75	0.53	0.418	0.47	0.53
HCol-Ade180Sur-08	RDgCol07 10A0666	2007.8 Dead	2008/4/22	8		M	90	No	II	5x2.5x1cm	12.5	2	T3 N1bM0 3B	0.6287	0.76	0.53	0.433	0.47	0.57
HCol-Ade180Sur-04	RDgCol07 06A0588	2007.5 Dead	2010/6/24	37		M	66	No	II	2.5x2x1cm	5	0	T4a N0 M0 2B	0.6102	0.59	0.53	0.351	0.27	0.55
HCol-Ade180Sur-08	RDgCol07 06A0618	2007.6 Alive	2015.7	97		F	64	No	I-II	5x5x1cm	25	0	T4b N0 M0 2C	0.5482	0.66	0.53	0.348	0.36	0.46
HCol-Ade180Sur-08	RDgCol08 03A0966	2008.3 Alive	2015.7	88		M	67	No	I-II	9.5x6x2cm	114	0	T2 N0 M0 1	0.5988	0.72	0.53	0.392	0.43	0.57
HCol-Ade180Sur-08	RDgCol07 09A0647	2007.7 Dead	2013/11/17	76		F	66	No	I-III	①7x5x2cm ②5x4x 0.5cm	80	1	N1aM0 3	0.5656	0.69	0.53	0.376	0.39	0.56

HCol-Ade180Sur-04	RDgCol07 04A0464	2007.3 Alive	2012/8/16	65	2013	M	67	No	II	15x13x 11cm	2145	0	T3 N0 M0 2A	0.4616	0.43	0.53	0.272	0.2	0.35
HCol-Ade180Sur-04	RDgCol06 11A0309	2006.9 Dead	2008/11/3	26		M	83	No	II	7.5x5x2cm	75	2	T4b N1b M0 3C	0.8046	0.93	0.53	0.398	0.4	0.52
HCol-Ade180Sur-08	RDgCol08 01A0882	2007-1 Dead	2008/12/11	12		M	65	No	II-III	5x2x1.2cm	12		T3 N0 M0 2A	0.508	0.74	0.53	0.336	0.31	0.47
HCol-Ade180Sur-08	RDgCol08 02A0936	2008.1 Alive	2015.7	90		F	81	No	I-II	4.8x3.5x 1.5cm	25.2	0	T2 N0 M0 1	0.3729	0.44	0.54	0.328	0.34	0.51
HCol-Ade180Sur-04	RDgCol07 05A0536	2007.4 Alive	2012/8/16	64	2013	M	67	No	II-III	12x11x5cm	660	0	T4b N0 M0 2A	0.6016	0.85	0.54	0.324	0.28	0.4
HCol-Ade180Sur-08	RDgCol08 01A0887	2007-1 Dead	2010/8/14	32		M	73	No	II	7x4x1.8cm	50.4	0	T4a N0 M0 2B	0.563	0.7	0.54	0.367	0.42	0.53
HCol-Ade180Sur-04	RDgCol07 05A0538	2007.4 Dead	2011/12/1	56		M	74	No	I-II	4x3x1.5cm, 2.8x2x2cm	29.2	0	T3 N0 M0 2A	0.6496	0.86	0.54	0.52	0.67	0.68
HCol-Ade180Sur-08	RDgCol07 06A0620	2007.6 Dead	2008/4/24	10		M	57	No	II	3x2x1cm	6	1	T4b N1a M0 3C	0.5696	0.71	0.55	0.334	0.34	0.49
HCol-Ade180Sur-04	RDgCol06 09A0280	2006.7 Alive	2015.7	108		F	81	No	II	9x7x3cm	189		T3 N0 M0 2A	0.7827	0.84	0.56	0.319	0.32	0.47
HCol-Ade180Sur-08	RDgCol08 04A0987	2008.4 Dead	2012/7/15	51		F	70	Liver	II	5x4x3cm	60	5	T4b N2a M1ε 4A	0.582	0.71	0.56	0.401	0.46	0.52
HCol-Ade180Sur-08	RDgCol08 04A0980	2008.3 Alive	2015.7	88		F	73	No	II	6.5x5x 1.5cm	48.75	0	T3 N0 M0 2A	0.6309	0.77	0.56	0.429	0.48	0.58
HCol-Ade180Sur-08	RDgCol07 11A0771	2007.9 Alive	2015.7	94		M	63	No	II	5x4x1cm	20	0	T3 N0 M0 2A	0.6055	0.73	0.56	0.37	0.38	0.52
HCol-Ade180Sur-08	RDgCol08 01A0886	2007-1 Alive	2015.7	91		F	61	No	I-II	5x4x1cm	20	0	T3 N0 M0 2A	0.6244	0.75	0.57	0.251	0.29	0.38
HCol-Ade180Sur-08	RDgCol07 10A0680	2007.9 Dead	2008/6/19	9		F	72	No	III	3x3x1cm	9	3	T3 N1b M0 3B	0.6008	0.74	0.57	0.241	0.24	0.3
HCol-Ade180Sur-04	RDgCol07 01A0404	2007.1 Dead	2007/7/13	6		M	80	No	III	9x8x7cm	504	0	T4b N0 M0 2C	0.5033	0.77	0.57	0.404	0.4	0.14
HCol-Ade180Sur-08	RDgCol08 04A0986	2008.4 Dead	2013/1/10	57		F	75	No	II	7x4x1.5cm	42	0	T3 N0 M0 2A	0.6355	0.78	0.57	0.361	0.38	0.54
HCol-Ade180Sur-08	RDgCol07 12A0831	2007-1 Alive	2015.7	91		F	75	No	II	6x4x1.5cm	36	0	T3 N0 M0 2A	0.6187	0.76	0.58	0.417	0.45	0.58
HCol-Ade180Sur-08	RDgCol07 10A0674	2007.9 Dead	2008/7/28	10		M	76	No	II	6x3.5x 1.5cm	31.5	3	T3 N1b M0 3B	0.6407	0.78	0.58	0.384	0.41	0.55
HCol-Ade180Sur-08	RDgCol07 06A0623	2007.6 Alive	2015.7	97		F	60	No	II	5x4x1cm	20	2	T3 N1b M0 3B	0.6209	0.77	0.59	n/a	n/a	0.13
HCol-Ade180Sur-04	RDgCol07 06A0576	2007.5 Alive	2015.7	98		F	54	No	II	4x4x1cm	16	0	T3 N0 M0 2A	0.5672	0.6	0.59	0.371	0.55	0.63
HCol-Ade180Sur-04	RDgCol07 04A0454	2007.3 Alive	2012/8/16	65	2013	M	73	No	II-III	4.5x3.5x 1.5cm	23.63	0	T3 N0 M0 2A	0.6107	0.7	0.59	0.222	0.15	0.4
HCol-Ade180Sur-04	RDgCol07 04A0444	2007.2 Dead	2008/11/5	21		F	62	No	II	4x3x2.5cm, 2.5x2x 1.5cm	37.5	12	T3 N2b M0 3C	0.7027	0.86	0.59	0.344	0.37	0.5
HCol-Ade180Sur-04	RDgCol07 05A0528	2007.4 Alive	2015.7	99		M	78	No	I-III	2.7x2.5x 2cm	13.5	0	T1 N0 M0 1	0.4385	0.37	0.6	0.463	0.62	0.4

HCol-Ade180Sur-04	RDgCol07 06A0596	2007.5 Alive	2015.7	98	F	64	No	I	5x5x1.5cm	37.5	1	T3 N1aM0 3B	0.5715	0.56	0.6	0.317	0.26	0.5
HCol-Ade180Sur-08	RDgCol08 02A0941	2008.1 Dead	2011/10/8	45	M	54	No	II	3x3x1cm	9	1	T3 N1aM0 3B	0.3185	0.38	0.6	0.029	0.02	0.11
HCol-Ade180Sur-04	RDgCol07 05A0540	2007.4 Alive	2015.7	99	F	54	No	II-III	4x3.5x1cm	14	1	T4a N1aM0 3B	0.6297	0.73	0.6	0.45	0.56	0.52
HCol-Ade180Sur-04	RDgCol07 05A0529	2007.4 Alive	2015.7	99	F	77	No	II			0	T3 N0 M0 2A	0.6779	0.86	0.61	0.368	0.44	0.54
HCol-Ade180Sur-04	RDgCol07 04A0459	2007.3 Alive	2015.7	100	M	65	No	II	5.5x3x 0.8cm	13.2	0	T3 N0 M0 2A	0.7582	0.97	0.62	0.329	0.47	0.47
HCol-Ade180Sur-04	RDgCol07 06A0587	2007.5 Dead	2012/10/17	65	M	87	No	I	4.5x4x2cm	36	0	T3 N0 M0 2A	0.4113	0.36	0.62	0.307	0.3	0.46
HCol-Ade180Sur-08	RDgCol07 10A0669	2007.8 Dead	2008/6/15	10	F	61	No	II	6x4.5x 1.5cm	40.5	8	T3 N2bM0 3C	0.6475	0.78	0.62	0.414	0.43	0.57
HCol-Ade180Sur-04	RDgCol07 04A0455	2007.3 Dead	2011/4/9	49	F	78	No	II	3.5x3x1cm	10.5	1	T3 N1aM0 3B	0.6663	0.65	0.62	0.47	0.44	0.46
HCol-Ade180Sur-04	RDgCol07 04A0445	2007.2 Alive	2015.7	101	F	62	No	II	15x10x 10cm, 2x2x 1.5cm	1506	0	— N0 — —	0.633	0.64	0.64	0.595	0.84	0.64
HCol-Ade180Sur-04	RDgCol06 09A0291	2006.9 Alive	2015.7	106	F	62	No	II-III	7.5x5x2cm	75	0	T3 N0 M0 2A	0.6934	0.81	0.65	0.33	0.33	0.4
HCol-Ade180Sur-04	RDgCol06 09A0288	2006.8 Dead	2009/2/12	30	F	58	No	II-III	5x4x1.5cm	30	4	T3 N2aM0 3B	0.7092	0.85	0.7	0.466	0.47	0.55
HCol-Ade180Sur-04	RDgCol06 09A0277	2006.7 Alive	2015.7	108	M	62	No	II	4x3.5x 1.5cm	21	0	T3 N0 M0 2A	0.7658	0.79	0.7	0.581	0.58	0.62
HCol-Ade180Sur-04	RDgCol07 06A0593	2007.5 Dead	2010/3/29	34	M	84	No	II	9x8x3cm	216	0	T3 N0 M0 2A	0.7152	0.82	0.7	0.385	0.33	0.61
HCol-Ade180Sur-04	RDgCol06 09A0289	2006.8 Dead	2007/1/25	5	M	72	No	I-III	4x2.5x2cm	20		T3 N0 M0 2A	0.5695	0.79	0.71	0.315	0.32	0.09
HCol-Ade180Sur-04	RDgCol06 11A0311	2006.9 Dead	2008/10/16	25	F	52	No	II	5x4x2.5cm	50	6	T3 N2aM0 3B	0.7023	0.66	0.71	0.511	0.51	0.48
HCol-Ade180Sur-04	RDgCol06 09A0293	2006.9 Dead	2011/11/27	62	F	75	No	II	4.5x3x 1.5cm	20.25	2	T3 N1bM0 3B	0.6471	0.66	0.72	0.528	0.53	0.61
HCol-Ade180Sur-04	RDgCol07 06A0591	2007.5 Alive	2015.7	98	F	75	No	II	7x4x1cm	28	0	T3 N0 M0 2A	0.7822	0.85	0.74	0.578	0.61	0.69
HCol-Ade180Sur-04	RDgCol07 06A0577	2007.5 Dead	2008/4/29	11	M	76	No	II	3.5x3x1cm, 7x6x3cm	136.5	0	T3 N0 M0 2A	0.6904	0.84	0.74	0.469	0.49	0.58
HCol-Ade180Sur-04	RDgCol07 05A0526	2007.4 Dead	2008/9/19	17	M	73	Liver	I	5.5x4.5x 2.5cm	61.88	1	T1 N1aM1ε 4A	0.6279	0.69	0.75	0.249	0.62	0.44
HCol-Ade180Sur-04	RDgCol07 06A0583	2007.5 Dead	2009/9/3	28	M	64	No	II-III	5.5x4x 2.5cm	55	0	T3 N0 M0 2A	0.6629	0.68	0.75	0.541	0.7	0.58
HCol-Ade180Sur-04	RDgCol06 09A0281	2006.7 Dead	2009/2/17	31	M	70	No	II	6x5.5x1, 7x 5x0.5cm	50.5		T3 N0 M0 2A	0.8426	0.94	0.78	0.43	0.43	0.57
HCol-Ade180Sur-04	RDgCol07 06A0590	2007.5 Alive	2015.7	98	F	58	No	II	3.5x2x 1.5cm	10.5		T3 N0 M0 2A	0.8155	0.93	0.79	0.488	0.62	0.61
HCol-Ade180Sur-08	RDgCol08 04A0982	2008.3 Alive	2015.7	88	M	58	No	II	6x5x1.5cm	45	0	T3 N0 M0 2A	n/a	n/a	n/a	0.416	0.46	0.53

Table S2: Correlation between the mRNA expressions of COL5A2 and clinicopathological variables in patients with colorectal cancer revealed by dataming of Oncomine gene array datasets.

variables	Dataset ^a	Total cases	COL5A2 mRNA		χ^2	p	
			< median	> median			
Dukes Stage	Jorissen Colorectal 3 (154)						
		Dukes Stage A	24	19	5	13.2 0.004	
		Dukes Stage B	54	29	25		
		Dukes Stage C	43	15	28		
		Dukes Stage D	33	14	19		
		Bittner Colon (373)					
	Dukes Stage A		30	19	3.99 0.046		
	Dukes Stage B, C, D		85	103			
T stage	Bittner Colon (373)						
		Tis, T1-T2	70	43	27	5.22 0.022	
		T3-T4	248	114	134		
		TCGA Colorectal (237)					
	T1-T2	53	33	20	4.18 0.041		
	T3	144	66	78			
Stage	Tsukamoto Colorectal (104)						
		Stage I-II	50	20	30	3.85 0.05	
		Stage III-IV	54	32	22		
Gender	Gaedcke Colorectal (130)						
		Female	21	15	6	5.3 0.021	
		Male	44	18	26		
		Tsuji Colorectal (83)					
		Female	29	19	10	3.97 0.046	
		Male	54	23	31		
KRAS status	Gaedcke Colorectal (130)						
		Wild Type	35	13	22	5.63 0.018	
		Mutation	30	20	10		
Microsatellite	Watanabe Colon (84)						
		Microsatellite Stable	51	31	20	6.04 0.014	
		Microsatellite Instable	33	11	22		
Recurrence	Jorissen Colorectal 3 (154)						
		No Recurrence	27	8	19	6.54 0.011	
		Recurrence	92	53	39		

^aThe analysis was performed using datasets from the Oncomine cancer gene expression microarray DB (<https://www.oncomine.org/resource/login.html>). The total case numbers are shown in the brackets.

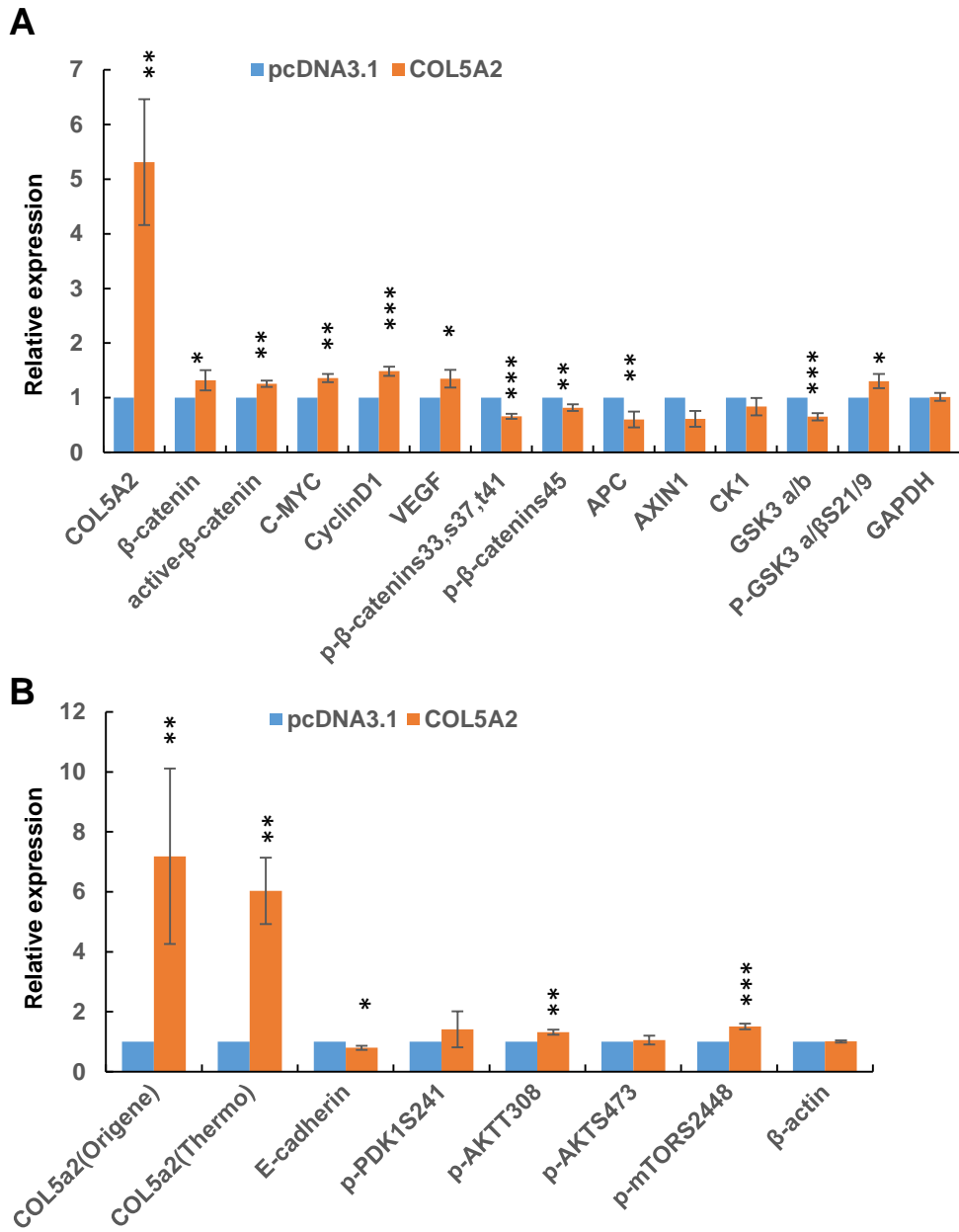


Figure S1. Statistic analysis of Western blot densitometry of figure 4B and C. The expressions in 293FT, SW620 and HCT116 were treated as biological replicates. The control was normalized to 1. The significance of the fold change was calculated with the Student's t test. A p value < 0.05 was considered as statistically significant. * means < 0.05. ** means < 0.01. *** means < 0.001.

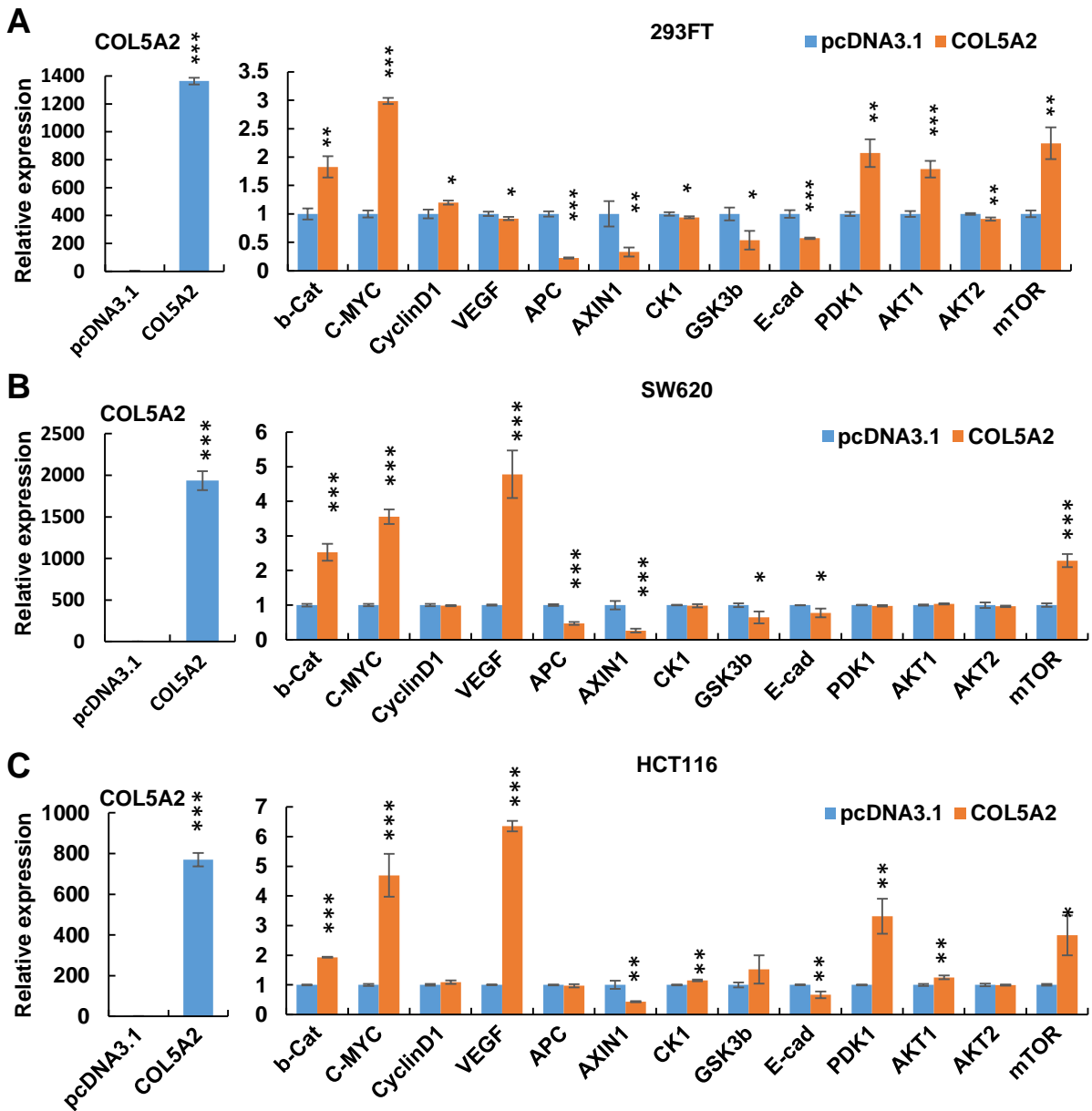
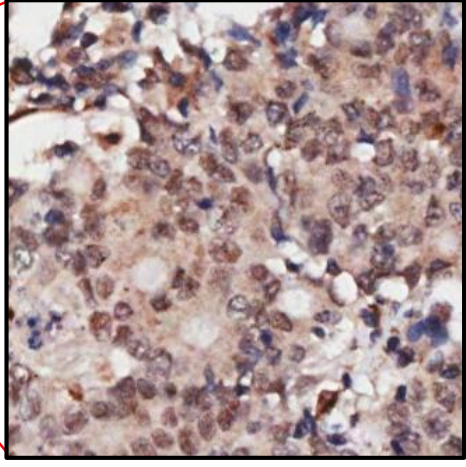
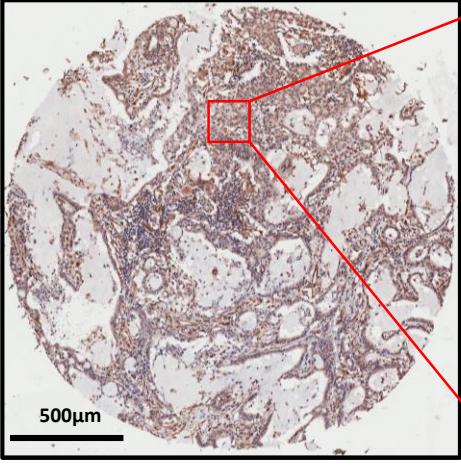


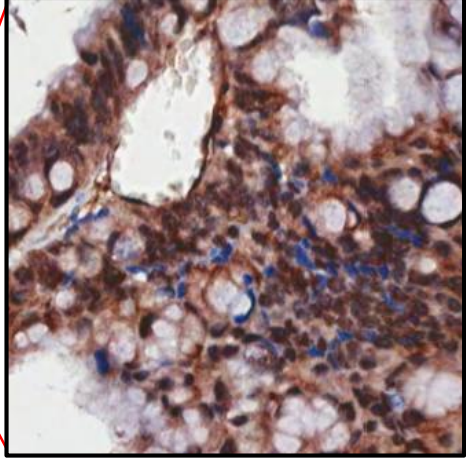
Figure S2. mRNA expression changes of the molecules of WNT/ β -catenin and PI3K/AKT pathways by COL5A2 ectopic expression. COL5A2 was overexpressed in 293FT (A), SW620 (B) and HCT116 (C) cells and the mRNA expressions of selected genes were measured with qPCR. The significance of the fold change was calculated with the Student's t test. A p value < 0.05 was considered as statistically significant. * means < 0.05. ** means < 0.01. *** means < 0.001.

A

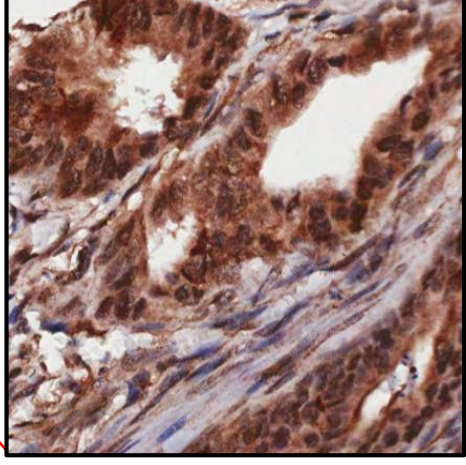
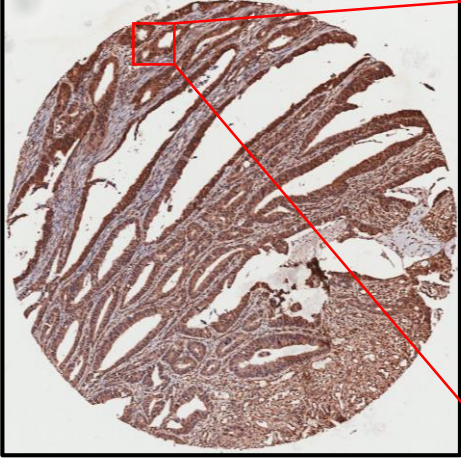
Cancer Tissue #1



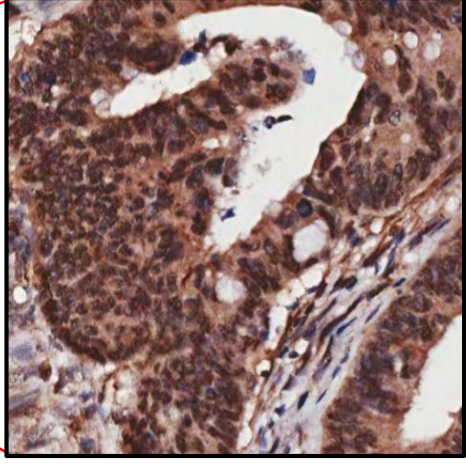
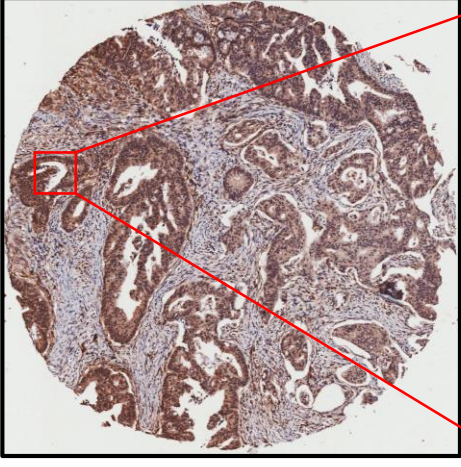
Cancer Tissue #3



Cancer Tissue #2



Cancer Tissue #4



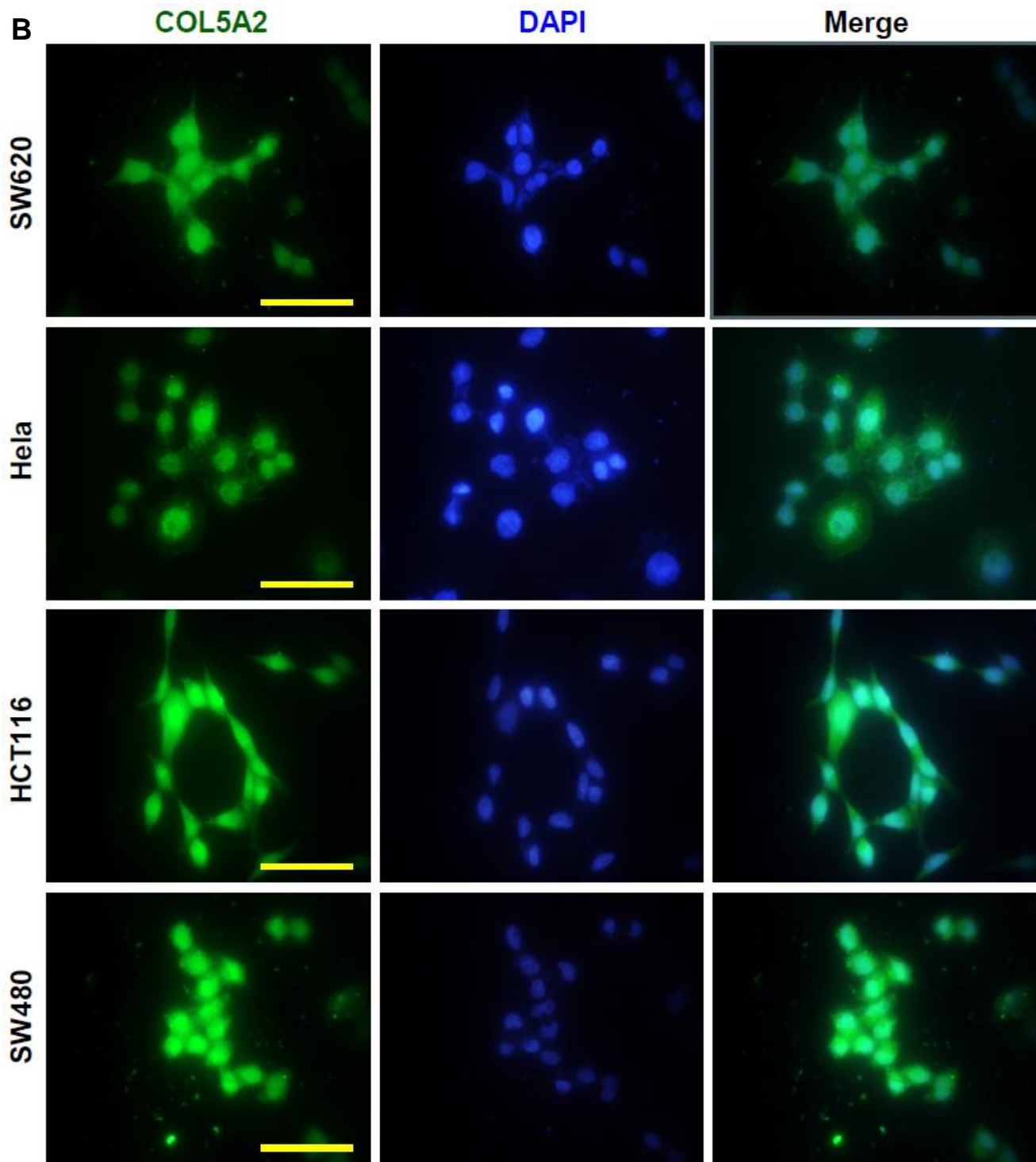


Figure S3. Nuclear localization of COL5A2.

A Immunohistochemistry analysis was performed using commercial tissue microarrays. Nuclear localization of COL5A2 in CRC tissue. The bar represents 500 μm .

B Immunofluorescence analysis of COL5A2 in SW620, HCT116, SW480 and Hela cells. The bar represents 50 μm .