

Table SI. Types of 16 primary antibodies, specification of the clones, lot number, incubated time, dilutions, manufacturer and type of immunostainer.

Antibody	Clone	Lot no.	Cat. no.	Incubation temperature, °C	Positive control	Incubation time, min	Dilution	Manufacturer	Automate immunostainer
Bcl-2	124	41247607	IR614	36	Tonsil	32	Ready to use	Dako; Agilent Technologies, Inc.	BenchMark ULTRA
Bcl-xL	54H6	20492H	2764S	36	Tonsil	32	1:4,000	Cell Signaling Technology, Inc.	BenchMark ULTRA
Bak	D4E4	22783K	12105S	36	Tonsil	32	1:500	Cell Signaling Technology, Inc.	BenchMark ULTRA
Bax	D2E11	23328M	42977SF	36	Tonsil	32	1:500	Cell Signaling Technology, Inc.	BenchMark ULTRA
β -catenin	β -catenin-1	41372773	GA702	25	Appendix	32	Ready to use	Dako; Agilent Technologies, Inc.	Dako Autostainer
CD44	BLR03 8F	ab243894	ab243894	36	Tonsil	60	1:100	Abcam	BenchMark ULTRA
Cyclin D1	EP12	11339612	GA083	25	Tonsil	20	Ready to use	Dako; Agilent Technologies, Inc.	Dako Autostainer
Ki67	MIB-1	41439159	GA626	25	Appendix	32	Ready to use	Dako; Agilent Technologies, Inc.	Dako Autostainer
p16	E6H4	H25638	705-4713	36	Tonsil	32	Ready to use	Roche Diagnostics, Ltd.	BenchMark ULTRA

p53	DO-7	41379688	GA616	25	Adenocarcinoma of colon	32	Ready to use	Dako; Agilent Technologies, Inc.	Dako Autostainer
HIF-1 α	AI-2	ESEE122	sc-13515	36	Urinary bladder	60	1:500	Santa Cruz Biotechnology, Inc.	BenchMark ULTRA
pRb	Ser780	E7105	9307S	25	Tonsil	1200	1:500	Cell Signaling Technology, Inc.	Manual
RPA32	9H8	K1219	sc-56770	36	Tonsil	37	1:300	Santa Cruz Biotechnology, Inc.	BenchMark ULTRA
c-Met	D-4	D0819	sc-514148	36	Adenocarcinoma of colon	20	1:50	Santa Cruz Biotechnology, Inc.	BenchMark ULTRA
VEGF	-	AR4830121	PU483-UP	36	Anticarcinoma	32	1:500	BioGenex Laboratories	BenchMark ULTRA
PI3K	B-9	J1019	sc-1637	36	Appendix	20	1:100	Santa Cruz Biotechnology, Inc.	BenchMark ULTRA

Table SII. Median histoscore of protein expression in recurrent and non-recurrent LSCC, Mann-Whitney U Test.

Antibody	Patients with recurrent LSCC [median (IQR)]	Patients with non-recurrent LSCC [median (IQR)]	P-value
Bcl-2	0.15 (0.00-8.40)	0.60 (0.00-13.34)	0.3371
Bcl-xL	163.10 (82.39-204.32)	133.00 (137.39-202.46)	0.2887
BAK	52.16 (17.42-154.58)	84.83 (124.62-183.73)	0.1427
BAX	185.65 (45.52-193.78)	202.17 (33.31-270.39)	0.8578
β -catenin	193.78 (32.56-195.18)	183.16 (89.77-219.62)	0.8186
CD44	219.73 (172.77-232.37)	234.49 (190.67-282.95)	0.1620
Cyclin D1	35.83 (13.93-129.11)	56.65 (11.81-156.62)	0.1141
Ki67	35.83 (6.26-53.38)	26.10 (3.87-58.65)	0.6589
p16	1.83 (0.15-23.16)	0.99 (0-45.52)	0.1620
p53	33.28 (1.53-34.35)	24.49 (10.69-49.67)	0.3172
HIF-1 α	246.37 (191.93- 269.87)	261.22 (219.62-283.14)	0.8206
pRb	194.90 (39.61-180.23)	98.80 (135.16-225.28)	0.0014 ^a
RPA32	147.60 (71.62-180.96)	140.10 (78.24-228.32)	0.3918
c-Met	103.60 (141.56-195.03)	178.20 (86.76-163.91)	0.0012 ^a
VEGF	2.25 (0.04-15.32)	4.72 (0.62-26.79)	0.3075
PI3K	5.122 (3.86-60.51)	13.98 (0.17-22.40)	0.1233
^a P<0.05. P-value calculated using the Mann-Whitney U test. IQR, interquartile range; LSCC, laryngeal squamous cell carcinoma.			