

Table SI. Detailed procedure of H&amp;E staining.

Procedure	Reagent	Duration	Temperature, °C
Dewaxing	Xylene	2 min	26
	Xylene	2 min	26
Dehydration	100% ethanol	2 min	26
	100% ethanol	2 min	26
	95% ethanol	2 min	26
Hematoxylin staining	Water wash	2 min	26
	Hematoxylin	3 min	26
Differentiation	Water wash	1 min	26
	Differentiator (mild acid)	1 min	26
Bluing	Water wash	1 min	26
	Bluing	1 min	26
Eosin staining	Water wash	1 min	26
	95% ethanol	1 min	26
	Eosin	45 sec	26
Dehydration	95% ethanol	1 min	26
	100% ethanol	1 min	26
Clearing	100% ethanol	1 min	26
	Xylene	2 min	26
Cover-slipping	Xylene	2 min	26
	Mounting medium	/	26

Table SII. Antibodies for immunohistochemical analysis of the tissue microarray.

Marker	Company	Catalog. no.	Dilution	Antigen retrieval	Incubation condition		Assessment
					Duration, mins	Temperature, °C	
SH3BGRL3	Sigma-Aldrich; Merck KGaA	HPA030848	1:500	EDTA PH8	56	37	Cytoplasmic
MLH1	Fuzhou Maixin Biotechnology Co., Ltd.	MX063	Pre-diluted	EDTA PH8	30	32	Nuclear
MSH2	Fuzhou Maixin Biotechnology Co., Ltd.	MX061	Pre-diluted	EDTA PH8	30	32	Nuclear
MSH6	Fuzhou Maixin Biotechnology Co., Ltd.	MX056	Pre-diluted	EDTA PH8	30	32	Nuclear
PMS2	Fuzhou Maixin Biotechnology Co., Ltd.	EP51	Pre-diluted	EDTA PH8	30	32	Nuclear
EGFR	Fuzhou Maixin Biotechnology Co., Ltd.	SP111	Pre-diluted	EDTA PH8	30	32	Membraneous and cytoplasmic
HER-2	Roche Diagnostics	4B5	Pre-diluted	EDTA PH8	32	37	Membraneous

SH3BGRL3, SH3 domain-binding glutamic acid-rich protein-like 3; MLH1, MutL protein homolog 1; MSH6, MutS homolog 6; PMS2, postmeiotic segregation increased 2; HER-2, human epidermal growth factor receptor 2.

Table SIII. Reverse transcription-quantitative PCR results of SH3 domain-binding glutamic acid-rich protein-like 3 in Epstein-Barr virus-negative gastric cancer fresh samples.

MeanCt SH3BGRL3	$\Delta$ Ct	$\Delta\Delta$ Ct	$2^{-\Delta\Delta$ Ct}
20.170	3.875	1.0265	0.490899635
22.775	1.610	-1.2385	2.359530794
28.820	2.565	-0.2835	1.217144116
22.590	1.130	-1.7185	3.290940630
28.515	1.915	-0.9335	1.909903836
26.155	2.055	-0.7935	1.733274316
25.685	1.865	-0.9835	1.977256449
19.890	2.615	-0.2335	1.175683719
24.030	2.255	-0.5935	1.508902932
20.985	3.520	0.6715	0.627853555
21.720	2.440	-0.4085	1.327305070
24.560	2.590	-0.2585	1.196234308
23.665	2.985	0.1365	0.909723483
23.575	3.805	0.9565	0.515305537

SH3BGRL3, SH3 domain-binding glutamic acid-rich protein-like 3