

Supplementary Information

for

Detection of microsatellite instability with Idylla MSI assay in colorectal and endometrial cancer

Iiris Ukkola^{1,2}, Pirjo Nummela², Annukka Pasanen¹, Mia Kero¹, Anna Lepistö^{2,3}, Soili Kytölä⁴, Ralf Bützow^{1,2} & Ari Ristimäki^{1,2}

E-mail of corresponding author: ari.ristimaki (at) helsinki.fi

¹Department of Pathology, HUSLAB, HUS Diagnostic Center, Helsinki University Hospital and University of Helsinki, Helsinki, Finland

²Applied Tumor Genomics Research Program, Research Programs Unit, University of Helsinki, Helsinki, Finland

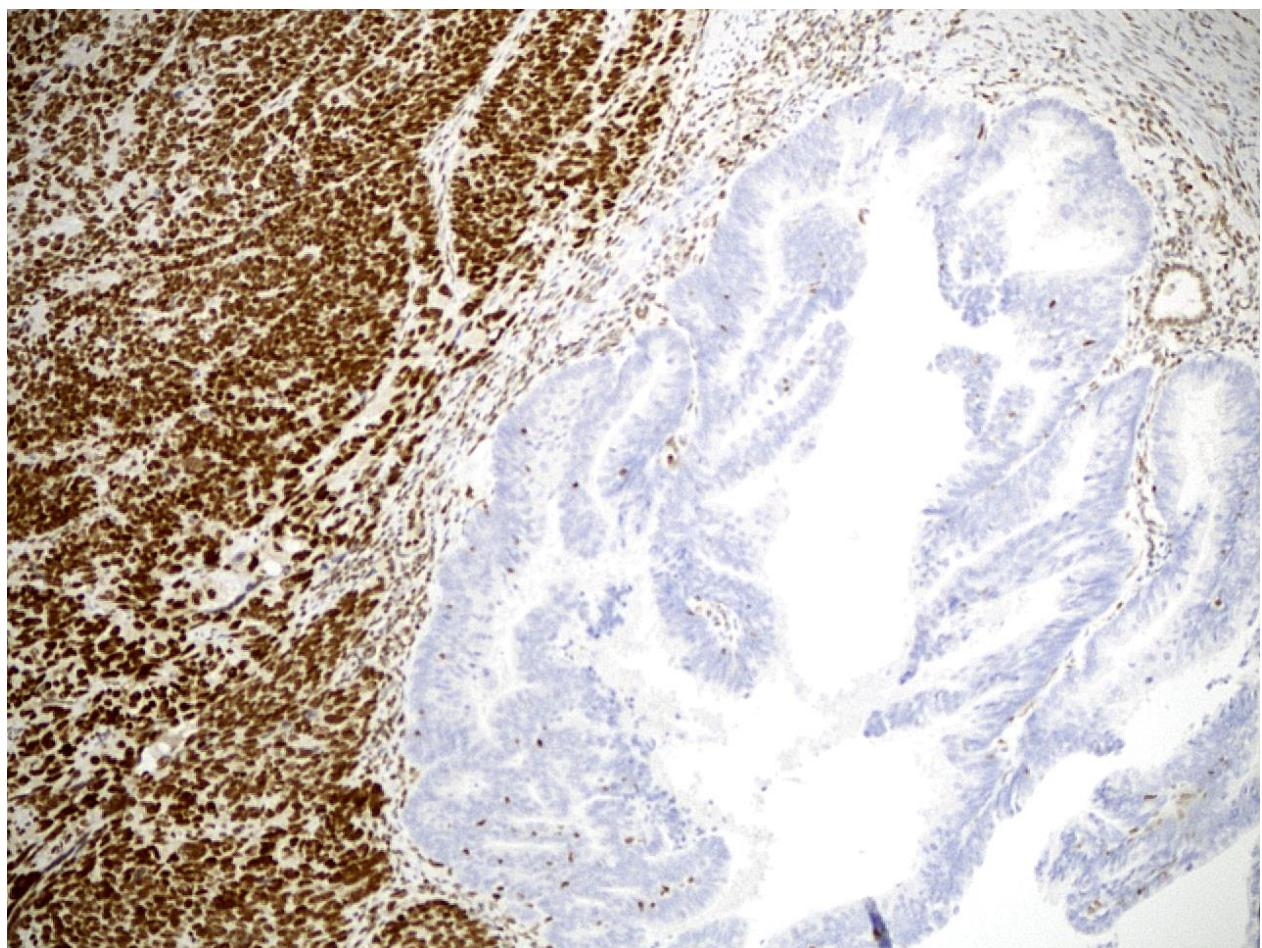
³Department of Gastrointestinal Surgery, Helsinki University Hospital, Helsinki, Finland

⁴Department of Genetics, HUSLAB, HUS Diagnostic Center, Helsinki University Hospital, Helsinki, Finland

Supplementary Table S1 Characteristics of the performance of Idylla MSI test in respect of variable tumor cell percentage

			Biomarker									
Case	Tumor cells (%)	Tissue area (mm ²)	<i>ACVR2A</i>	<i>BTBD7</i>	<i>DIDO1</i>	<i>MRE11</i>	<i>RYR3</i>	<i>SEC31A</i>	<i>SULF2</i>	Number of mutated biomarkers	Idylla MSI analysis	
B04	15	150	-	-	-	-	-	-	-	0/7	MSS	
	30	300	-	-	+	+	-	-	-	2/7	MSI	
	60	50	-	-	+	+	-	-	-	2/7	MSI	
B05	10	150	-	-	-	-	-	-	-	0/7	MSS	
	30	140	-	+	-	-	-	-	+	2/7	MSI	
	70	80	-	+	+	+	-	+	+	5/7	MSI	
B09	15	300	-	-	-	-	-	-	-	0/7	MSS	
	30	25	-	+	+	+	+	+	+	6/7	MSI	
B10	15	270	-	-	-	-	-	-	-	0/7	MSS	
	50	270	+	+	+	+	+	-	+	6/7	MSI	
B35	15	150	-	-	-	-	-	-	-	0/7	MSI	
	40	60	+	-	-	+	-	-	+	3/7	MSI	
B37	15	300	-	+	+	-	+	-	-	3/7	MSI	
	25	100	-	-	+	-	+	-	-	2/7	MSI	
	60	25	-	+	+	-	+	+	+	5/7	MSI	
B38	15	300	-	-	-	-	-	-	-	0/7	MSS	
	25	150	-	-	-	-	-	-	-	0/7	MSS	
	50	50	-	-	+	+	-	-	+	3/7	MSI	
B54	15	300	-	+	+	+	+	+	+	6/7	MSI	
	25	150	-	+	+	+	+	+	+	6/7	MSI	
	60	55	-	+	+	+	+	+	+	6/7	MSI	

MSI, microsatellite instable; MSS, microsatellite stable



Supplementary Fig. S1 Endometrial cancer with heterogeneous loss of MLH1 (case B107). On left is shown solid component with intact MLH1 expression, whereas on the right is glandular endometrioid component with loss of MLH1 expression in cancer cells and intact MLH1 expression in intraepithelial lymphocytes (a concomitant loss of PMS2 protein expression was also detected in cancer cells, whereas MSH2 and MSH6 protein expression was intact, not shown). Original magnification 200x, DAB was used as a chromogen.