				cells/ml urine (counted)	NTC	0	0	1.4x10^2 (40)	1.4x10^2 (0)	1.4x10^2 (120)	1.4x10^3 (1400)	1.4x10^4	1.4x10^5	1.4x10^6	1.4x10^7		
				Array	12	10	9	8	7	6	5	4	3	2	1		
				SNP													
Klebsiella pneumoniae , KPC-2	Qiagen 1	MM/PM	Sense	814	0.709	0.723	0.995	0.493	0.378	0.558	0.475	0.282	0.344	0.293	0.397	0.7	Threshold
				716	0.582	0.703	0.739	0.728	0.721	0.374	0.348	0.337	0.221	0.284	0.250		
				308	0.268	0.220	0.506	0.184	0.100	0.109	0.089	0.063	0.050	0.060	0.066		
				147	0.112	0.244	0.414	0.153	0.084	0.062	0.031	0.013	0.016	0.014	0.013		
			Anti-Sense	814	0.807	0.875	0.889	0.273	0.342	0.116	0.848	0.036	0.027	0.027	0.030		
				716	0.803	0.579	0.939	0.712	0.692	0.468	0.263	0.262	0.095	0.139	0.291		
				308	0.051	0.119	0.426	0.041	0.025	0.026	0.021	0.040	0.014	0.023	0.016		
				147	0.158	0.318	0.481	0.145	0.118	0.114	0.112	0.099	0.161	0.196	0.202		
		average absolute PM signal intensity	Sense	814	343	103	39	252	214	1777	3815	6789	18130	24380	32301	363.7	LOD
				716	113	76	65	90	67	413	750	2942	3635	5441	8126	127.0	
				308	226	89	53	191	252	856	1324	10030	6630	9514	7231	243.3	
				147	264	92	71	281	393	1600	3185	6199	4169	5940	5138	280.1	
			Anti-Sense	814	66	29	26	51	75	410	1068	9299	5190	6641	4028	236.8	
				716	18	17	15	14	26	68	121	232	336	376	181	24.7	
				308	896	281	82	740	1267	4935	8761	6138	19642	24355	25792	1014.7	
				147	386	112	76	284	367	2206	7192	25454	42750	51968	63522	420.0	
		Variant Identified	Sense							KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2		
			Anti-Sense							KPC-2		KPC-2	KPC-2	KPC-2	KPC-2		
	Result	Variant Identified	Sense+Anti-Sense							KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	◄---	
		CV (if SD > 30% of PM)	Sense	814													
				716													
				308													
				147													
			Anti-Sense	814	86.18						155.67						
				716					92.12						68.00		
				308													
				147													
Klebsiella pneumoniae , KPC-2	Qiagen 2	MM/PM	Sense	814	0.544	0.577	0.676	0.953	0.847	0.650	0.647	0.482	0.498	0.551	0.553	0.7	Threshold
				716	0.695	0.744	0.795	0.795	0.616	0.535	0.412	0.292	0.268	0.322	0.276		
				308	0.246	0.275	0.331	0.327	0.186	0.123	0.139	0.069	0.056	0.066	0.066		
				147	0.166	0.220	0.341	0.310	0.158	0.095	0.068	0.015	0.014	0.013	0.020		
			Anti-Sense	814	0.337	0.437	0.471	0.676	0.385	0.245	0.068	0.035	0.027	0.028	0.029		
				716	0.860	0.975	0.961	0.828	0.878	0.979	0.591	0.175	0.143	0.127	0.161		
				308	0.145	0.135	0.100	0.157	0.061	0.039	0.037	0.024	0.021	0.023	0.024		
				147	0.199	0.304	0.275	0.386	0.234	0.116	0.128	0.141	0.315	0.383	0.397		
		average absolute PM signal intensity	Sense	814	137	73	158	66	195	321	1725	6194	28580	31303	29887	177.9	LOD
				716	103	67	96	81	121	150	569	2523	9466	11844	12068	130.9	
				308	109	72	101	78	180	259	914	5929	9412	11538	10759	113.9	
				147	160	103	158	105	193	370	2030	6270	5599	6956	6006	172.4	
			Anti-Sense	814	34	23	36	28	49	79	451	4500	5427	6061	5343	39.5	
				716	9	7	10	19	14	10	58	146	319	327	275	11.5	
				308	245	201	369	274	711	1264	5285	7966	31423	30285	29530	281.2	
				147	357	103	132	141	191	464	3203	21858	59444	58981	52690	401.1	
		Variant Identified	Sense							KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2		
			Anti-Sense								KPC-2	KPC-2	KPC-2	KPC-2	KPC-2		
	Result	Variant Identified	Sense+Anti-Sense							KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	◄---	
		CV (if SD > 30% of PM)	Sense	814													
				716					70.68								
				308													
				147													
			Anti-Sense	814													
				716				58.71		40.73	86.63						
				308													
				147													
Klebsiella pneumoniae , KPC-2	Norgen 1	MM/PM	Sense	814	0.739	0.618	0.746	0.375	0.466	0.378	0.342	0.341	0.353	0.297	0.308	0.7	Threshold
				716	0.584	0.646	0.632	0.450	0.480	0.374	0.342	0.298	0.378	0.430	0.447		
				308	0.250	0.216	0.175	0.106	0.107	0.083	0.100	0.069	0.094	0.109	0.086		
				147	0.199	0.147	0.144	0.042	0.051	0.023	0.025	0.012	0.017	0.019	0.012		
			Anti-Sense	814	0.739	0.369	0.292	0.093	0.072	0.043	0.055	0.042	0.046	0.055	0.057		
				716	0.576	0.632	0.998	0.320	0.349	0.148	0.174	0.113	0.085	0.091	0.590		
				308	0.074	0.059	0.044	0.036	0.037	0.034	0.039	0.024	0.027	0.026	0.018		
				147	0.245	0.181	0.192	0.072	0.129	0.130	0.167	0.170	0.265	0.276	0.264		
		average absolute PM signal intensity	Sense	814	319	307	358	1393	3309	3694	4641	7063	8250	7508	12148	346.1	LOD
				716	130	146	123	369	731	1259	2330	3422	5343	6130	7324	140.3	
				308	137	164	184	443	821	2405	3946	6249	9609	12046	11678	150.8	
				147	181	240	231	806	1740	2789	3745	3797	6077	6609	4783	196.8	
			Anti-Sense	814	45	41	65	163	285	2093	4395	5075	8382	11510	9562	60.8	
				716	30	13	14	22	48	98	180	320	652	672	406	54.0	
				308	710	844	934	2529	4816	3981	4744	5955	10820	8843	6401	762.8	
				147	184	320	223	1505	3221	10009	13812	18744	30432	30856	32302	204.6	
		Variant Identified	Sense					KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2		
			Anti-Sense							KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2		
	Result	Variant Identified	Sense+Anti-Sense					KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	◄---	
		CV (if SD > 30% of PM)	Sense	814													
				716													
				308													
				147													
			Anti-Sense	814	66.25												
				716											156.86		
				308													
				147													
Klebsiella pneumoniae , KPC-2	Norgen 2	MM/PM	Sense	814	0.650	0.993	0.850	0.340	0.781	0.460	0.357	0.500	0.330	0.286	0.342	0.7	Threshold
				716	0.383	0.680	0.665	0.895	0.625	0.295	0.304	0.303	0.335	0.336	0.324		
				308	0.443	0.734	0.600	0.383	0.357	0.198	0.090	0.099	0.093	0.097	0.087		
				147	0.320	0.538	0.320	0.301	0.367	0.145	0.034	0.054	0.043	0.040	0.035		
			Anti-Sense	814	0.662	0.940	0.952	0.554	0.957	0.246	0.033	0.045	0.053	0.050	0.037		
				716	0.872	0.890	0.978	0.472	0.960	0.630	0.691	0.262	0.105	0.147	0.121		
				308	0.154	0.470	0.399	0.648	0.290	0.049	0.039	0.033	0.037	0.045	0.040		
				147	0.245	0.330	0.402	0.729	0.415	0.117	0.214	0.205	0.171	0.179	0.179		
		average absolute PM signal intensity	Sense	814	24	6	20	45	25	289	1614	6904	6294	4062	5160	30.7	LOD
				716	24	10	22	26	22	121	552	2428	2542	3065	2313	78.8	
				308	25	15	25	28	41	150	1527	1917	2207	4229	3739	28.9	
				147	72	31	52	53	75	259	1195	1463	1648	2818	2128	111.9	
			Anti-Sense	814	10	6	21	26	10	88	833	968	1656	4127	1764	13.5	
				716	5	7	6	19	4	10	7	117	177	289	109	6.3	
				308	85	20	27	37	54	545	812	6449	5917	5163	4104	108.3	
				147	69	24	34	43	61	500	1181	22043	20106	21532	15687	87.4	
		Variant Identified	Sense							KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2		
			Anti-Sense								KPC-2	KPC-2	KPC-2	KPC-2	KPC-2		
	Result	Variant Identified	Sense+Anti-Sense							KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	KPC-2	◄---	
		CV (if SD > 30% of PM)	Sense	814				108.13									
				716	77.30	36.56	50.48										
				308			58.95										
				147													
			Anti-Sense	814			73.06	94.00									
				716				126.49		60.70	31.22						
				308				66.62									
				147													

Figure S4: Identification of variant KPC-2 (in *K. pneumoniae*) from spiked urine samples. Overview on array data obtained after DNA extraction from spiked urine samples (10 dilution steps + no template control (NTC)) followed by hybridization. Listed are the average absolute perfect match (PM) signal intensities for every SNP position of sense and anti-sense probes. In addition the corresponding MM_{max}/PM ratios are presented for every SNP position. Once the threshold is reached (MM_{max}/PM > 0.7) the probes are not used for discrimination anymore (marked in dark grey). The same applies for the average absolute PM signal. Once the signal intensity is below the LOD, the probe set is not used for discrimination anymore, also shown in dark grey. Furthermore, the standard deviation (SD) is monitored and a probe set is flagged once the SD is larger than 30% of the PM signal, shown in light grey. The probe sets which fulfil all criteria are then used for discrimination and the identified variant is shown at the bottom of the table. This is shown for extractions carried out with Qiagen and Norgen in duplicates. In all cases variant KPC-2 was correctly identified to a concentration of 120 cells / ml urine (Qiagen) and 120 and 40 cells / ml urine (Norgen). A summary of the final results is shown in Figure 4.