

Supplementary Table S5 Temporary changes of the microbial antibodies with highest SHAP values

Name of Microorganisms	A				B				C				D				E				F				G				H				I			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Staphylococcus aureus	8.10	8.06	7.63	8.26	4.27	4.10	3.76	4.36	6.89	6.67	6.17	6.08	4.73	3.86	2.64	0.00	6.87	7.73	6.25	6.77	5.30	4.76	4.48	5.88	4.46	4.13	3.48	4.40	5.23	5.32	4.65	5.06	6.23	6.12	5.92	6.22
Influenza B virus	5.51	6.08	5.43	5.63	5.04	6.88	5.81	5.31	5.58	7.48	6.03	5.63	6.71	9.45	8.30	7.07	3.82	4.63	3.39	3.61	2.93	3.32	2.67	3.24	4.06	5.50	4.61	4.61	4.23	5.13	3.80	4.74	4.55	5.46	4.62	4.71
Rubella virus	6.68	6.46	6.56	6.60	4.67	4.61	4.46	4.44	7.82	7.73	7.74	7.86	4.44	4.93	4.40	4.39	7.11	7.17	5.39	4.91	5.94	5.64	5.66	0.86	2.66	2.62	2.21	3.17	3.23	3.38	3.53	3.67	3.56	3.41	3.24	3.35
Influenza A virus H11N6 (A/duck/England/1/1956)	5.32	6.10	5.77	5.61	5.00	7.61	5.83	5.46	6.76	8.43	7.98	6.97	5.87	8.77	8.21	6.41	2.71	3.38	3.55	3.50	4.82	4.89	4.78	4.00	3.82	4.25	4.19	4.19	4.60	5.58	4.51	4.68	3.58	4.70	3.65	3.91
Meyerozyma guilliermondii	3.28	3.86	3.35	3.52	4.66	4.74	4.14	4.79	4.32	4.22	4.62	4.88	0.00	0.00	0.00	0.00	3.10	3.25	3.92	4.13	4.61	4.36	4.49	3.73	3.91	2.82	3.18	2.77	0.00	0.00	0.00	0.00	3.19	3.16	2.87	3.50
Influenza B virus	4.54	4.90	4.68	4.63	4.17	5.97	4.67	4.43	4.52	6.13	4.98	4.61	5.73	8.28	7.09	5.91	2.85	3.68	2.73	3.00	2.06	2.57	1.85	2.43	3.51	4.66	3.92	3.90	3.52	4.35	3.02	4.03	3.78	4.68	3.78	3.85
Legionella cardiaca	1.26	1.11	0.99	1.44	3.89	3.63	4.06	3.86	3.49	3.70	3.56	3.36	1.16	1.31	1.26	1.13	1.30	1.29	0.82	0.39	0.49	0.77	0.78	2.69	0.33	0.36	0.31	0.15	3.42	3.48	3.36	3.73	1.53	1.52	1.33	1.59
Francisella philomiragia	6.04	6.99	6.94	6.00	2.31	2.54	2.83	2.20	6.50	6.78	6.61	6.49	7.35	7.49	7.24	7.43	5.53	5.61	4.74	4.47	4.47	4.41	4.42	0.63	1.65	1.76	1.36	1.91	3.21	3.32	3.25	3.42	5.01	4.89	4.87	4.97
Rubella virus	5.91	5.97	6.03	6.18	4.00	4.06	4.21	4.20	7.41	7.51	7.16	7.33	4.26	4.51	4.50	4.10	6.95	6.76	5.14	4.66	5.53	5.47	5.45	0.67	2.43	2.56	1.94	3.17	3.37	3.20	3.01	3.66	3.50	3.55	2.89	3.63
Influenza A virus H7N9 (A/Anhui/1/2013)	4.76	5.18	5.08	4.79	4.50	6.05	5.16	4.75	5.14	6.49	5.83	5.34	5.46	6.90	6.55	5.53	2.50	2.92	2.14	1.81	3.71	3.72	3.80	2.78	1.91	2.71	2.23	2.43	2.72	3.40	2.65	3.06	3.00	3.57	3.03	3.13

Changes in the level of antibodies against various mirioorganisms with highest SHAP values over time. In the Table, 1, 2, 3 and 4 represent the first, second, third and fourth blood sample collections, respectively. The fluorecence intensity ratios of relative values against the negative controls are indicated as relative log<sub>2</sub> ratios and represented by the red intensity in the figure.