



FLAVIVIRUS SEROLOGICAL PANEL 1-3

CERTIFICATE OF ANALYSIS

(Part ID: 600-002080; Lot ID: K23060)

Use

For the detection of antibodies (IgG) to Chikungunya, Dengue, Equine Encephalitis, St. Louis Encephalitis, Japanese Encephalitis, West Nile, Yellow Fever and Zika Viruses in serum and plasma samples.

Kit Components

Kit Components			
Kit Component	Part Number	Lot Number	Number Supplied
Flavivirus Serological Panel 1-3 Beads	100-001470	K23061	1
Serological Panel IgG Detection, 20X	200-001440	K23062	1
Flavivirus Serological Panel 1-3 Standard	300-001452	K23063	2
Flavivirus Serological Panel 1-3 Control 1	400-001454-1	K23136	2
Flavivirus Serological Panel 1-3 Control 2	400-001454-2	K23137	2
Serological Panel Sample Dilution Buffer 1	520-001094	K23066	1
10X Assay Buffer	530-001031	K23067	1
Clear Bottom Black Assay Plate	NA	NA	1
Plate Cover with Foil Sealer	NA	NA	1

Storage and Stability

Store kit at 2°C - 8°C.

Expiration Date: 1 year from date of receipt; Do not use beyond the expiration date



Standard Concentrations:

Standard Level	CHIK-E [RU]	DENV1-VLP [RU]	DENV2-NS1 [RU]	DENV3-NS1 [RU]	DENV4-VLP [RU]	EEV [RU]	JEV-NS1 [RU]
S8	1.0	1.0	1.0	1.0	1.0	1.0	1.0
S7	0.25	0.25	0.25	0.25	0.25	0.25	0.25
S6	0.063	0.063	0.063	0.063	0.063	0.063	0.063
S5	0.016	0.016	0.016	0.016	0.016	0.016	0.016
S4	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039
S3	0.00098	0.00098	0.00098	0.00098	0.00098	0.00098	0.00098
S2	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024
S1	0.000061	0.000061	0.000061	0.000061	0.000061	0.000061	0.000061

Standard Level	St L EV NS1 [RU]	WNV-ENV [RU]	WNV-NS1 [RU]	YFV-ENV [RU]	YFV-NS1 [RU]	ZIKA-VLP [RU]	ZIKA-NS1 [RU]
S8	1.0	1.0	1.0	1.0	1.0	1.0	1.0
S7	0.25	0.25	0.25	0.25	0.25	0.25	0.25
S6	0.063	0.063	0.063	0.063	0.063	0.063	0.063
S5	0.016	0.016	0.016	0.016	0.016	0.016	0.016
S4	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039
S3	0.00098	0.00098	0.00098	0.00098	0.00098	0.00098	0.00098
S2	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024
S1	0.000061	0.000061	0.000061	0.000061	0.000061	0.000061	0.000061

Control Ranges:

Control	Range	CHIK-E [RU]	DENV1-VLP [RU]	DENV2-NS1 [RU]	DENV3-NS1 [RU]	DENV4-VLP [RU]	EEV [RU]	JEV-NS1 [RU]
1	Low	0.022	0.020	0.024	0.025	0.022	0.017	0.020
	High	0.065	0.061	0.072	0.074	0.065	0.050	0.060
2	Low	0.081	0.077	0.088	0.10	0.069	0.056	0.066
	High	0.24	0.23	0.26	0.30	0.21	0.17	0.20

Control	Range	St L EV NS1 [RU]	WNV-ENV [RU]	WNV-NS1 [RU]	YFV-ENV [RU]	YFV-NS1 [RU]	ZIKA-VLP [RU]	ZIKA-NS1 [RU]
1	Low	0.019	0.018	0.023	0.021	0.015	0.016	0.015
	High	0.065	0.061	0.072	0.074	0.065	0.050	0.060
2	Low	0.072	0.065	0.077	0.070	0.063	0.053	0.062
	High	0.22	0.20	0.23	0.21	0.19	0.16	0.19

LDD: Determined by 20 replicates of BG +2SD.

LDD	CHIK-E [RU]	DENV1-VLP [RU]	DENV2-NS1 [RU]	DENV3-NS1 [RU]	DENV4-VLP [RU]	EEV [RU]	JEV-NS1 [RU]
With Dilution	0.12	0.12	0.12	0.16	0.12	0.12	0.12
Without Dilution	0.000061	0.000061	0.000061	0.000081	0.000061	0.000061	0.000061

LDD	St L EV NS1 [RU]	WNV-ENV [RU]	WNV-NS1 [RU]	YFV-ENV [RU]	YFV-NS1 [RU]	ZIKA-VLP [RU]	ZIKA-NS1 [RU]
With Dilution	0.12	0.12	0.12	1.4	0.12	0.37	0.12
Without Dilution	0.000061	0.000061	0.000061	0.000675	0.000061	0.00019	0.000061



LLOQ

LLOQ	CHIK-E [RU]	DENV1-VLP [RU]	DENV2-NS1 [RU]	DENV3-NS1 [RU]	DENV4-VLP [RU]	EEV [RU]	JEV-NS1 [RU]
With Dilution	0.24	0.12	0.12	0.23	0.12	0.57	0.12
Without Dilution	0.00012	0.000061	0.000061	0.00012	0.000061	0.00029	0.000061

LLOQ	St L EV NS1 [RU]	WNV-ENV [RU]	WNV-NS1 [RU]	YFV-ENV [RU]	YFV-NS1 [RU]	ZIKA-VLP [RU]	ZIKA-NS1 [RU]
With Dilution	0.55	0.12	0.32	4.0	1.4	0.91	0.32
Without Dilution	0.000061	0.00016	0.0020	0.00071	0.00045	0.00016	0.000061

Reference MFI Values:

Standard and control MFI values generated on a Luminex 200 instrument using the standard (low) PMT setting. Data represents the average MFI of multiple runs at Ampersand Biosciences.

Representative data, may vary by instrument

MFI	CHIK-E	DENV1-VLP	DENV2-NS1	DENV3-NS1	DENV4-VLP	EEV	JEV-NS1
S8	14207	14496	16650	9754	19049	17687	8680
S7	9302	8455	12788	6994	12421	12475	6268
S6	3775	3392	6390	2825	4631	5291	2805
S5	1185	1260	2104	830	1568	1691	906
S4	318	388	563	203	454	459	248
S3	92	124	163	55	127	134	76
S2	31	41	57	22	41	48	30
S1	19	21	31	16	21	29	21
Control 1	2862	2552	5298	2293	3720	3284	2024
Control 2	6878	6242	10768	5734	8090	7740	4435

MFI	St L EV NS1	WNV	WNV-NS1	YFV-ENV	YFV-NS1	ZIKA VLP	ZIKA-NS1
S8	17521	14179	13774	2007	12132	1744	8794
S7	13708	12378	8955	1094	10262	1359	7153
S6	6363	7535	3321	437	5198	713	4146
S5	2216	3093	876	158	2123	279	1770
S4	594	911	216	58	590	91	520
S3	163	255	64	31	164	38	163
S2	49	73	26	24	51	23	54
S1	20	30	19	23	28	18	32
Control 1	4574	5542	2452	326	3196	473	2669
Control 2	10130	10017	6417	760	7283	947	5425