

Figure S1

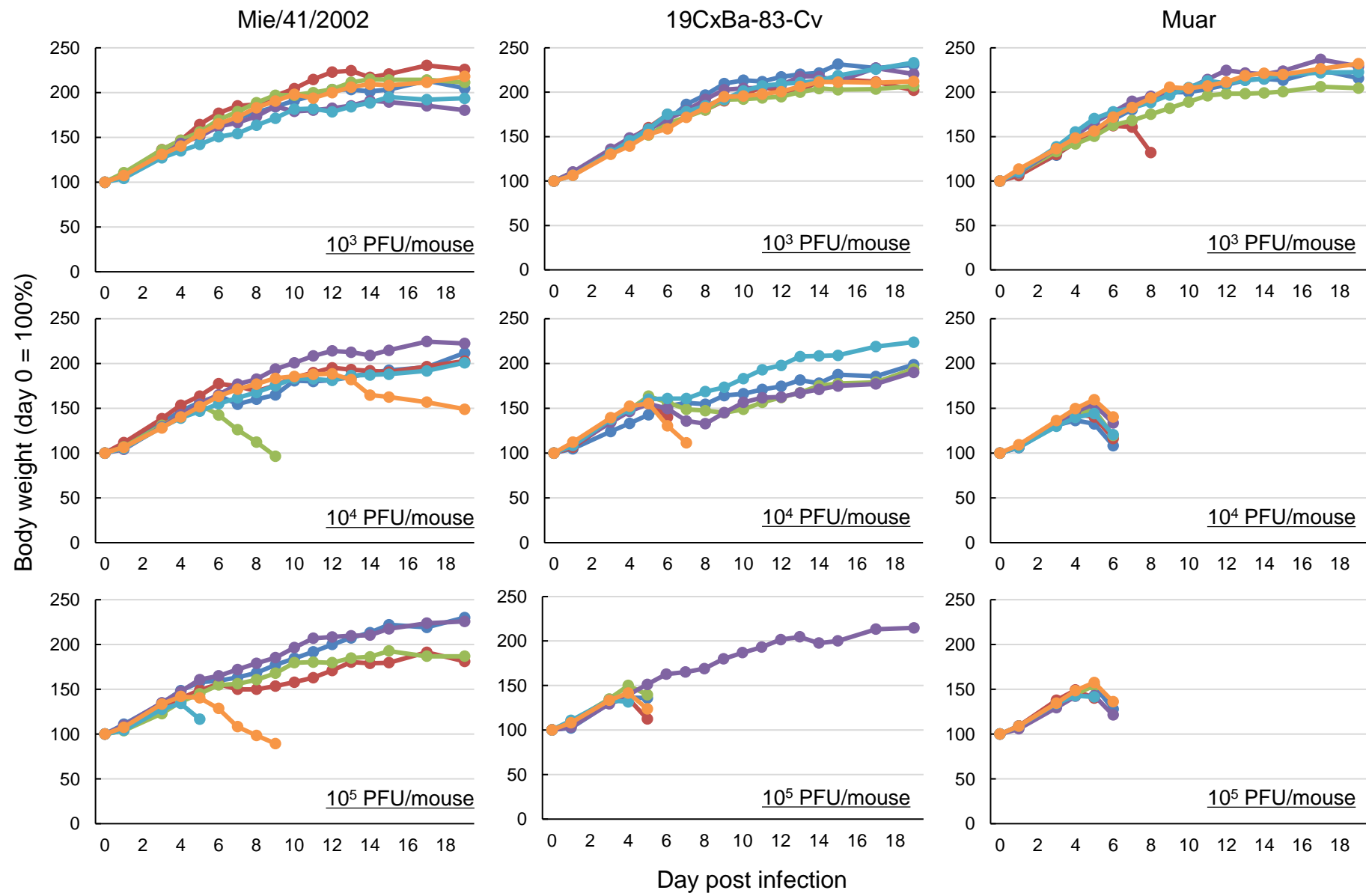


Figure S1. Body weight of mice inoculated with JEV strains (GI, GIV, GV) at three different doses (10^3 , 10^4 , 10^5 PFU/mouse) as shown in Figure 3. Colored lines indicate individual mice.

Figure S2

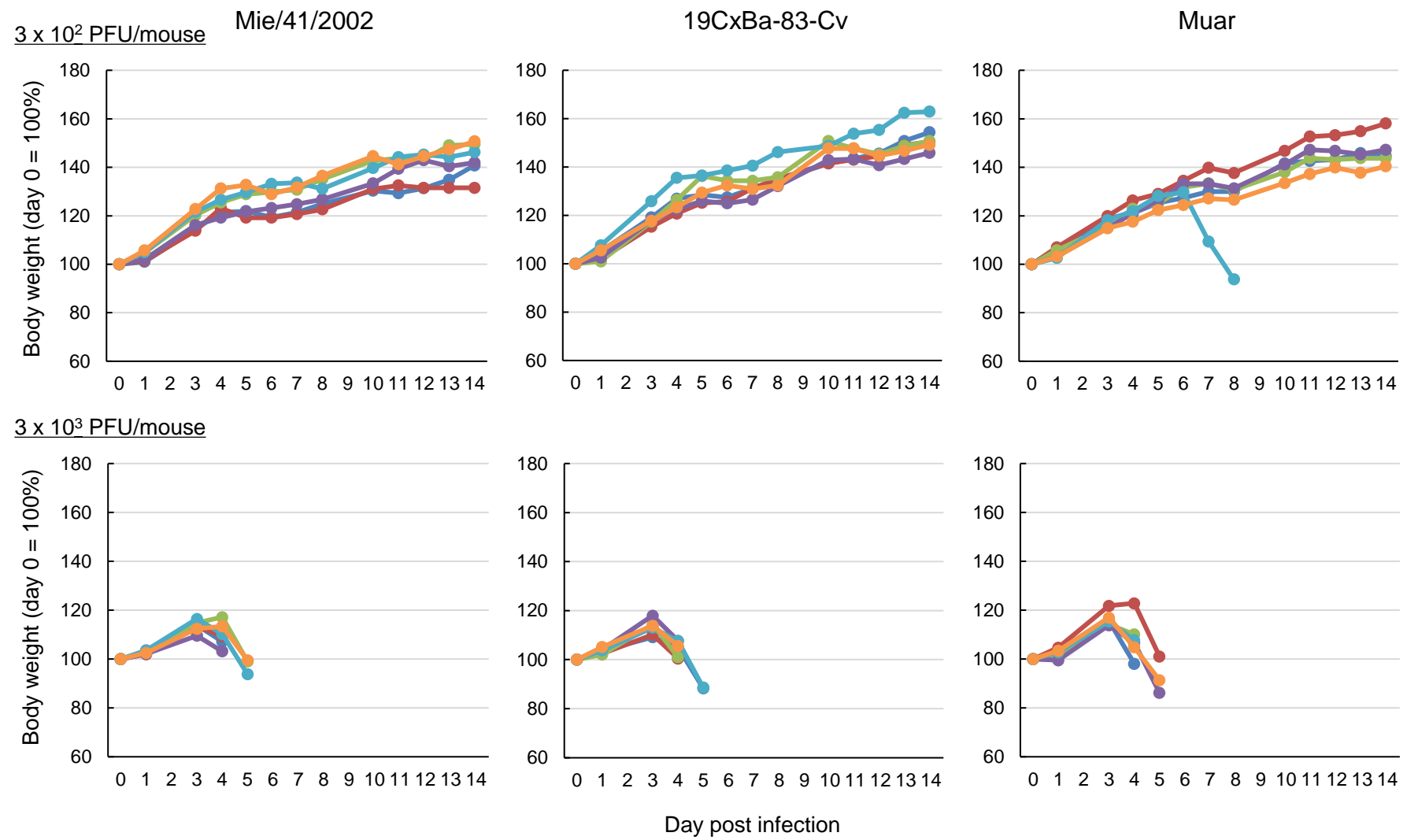


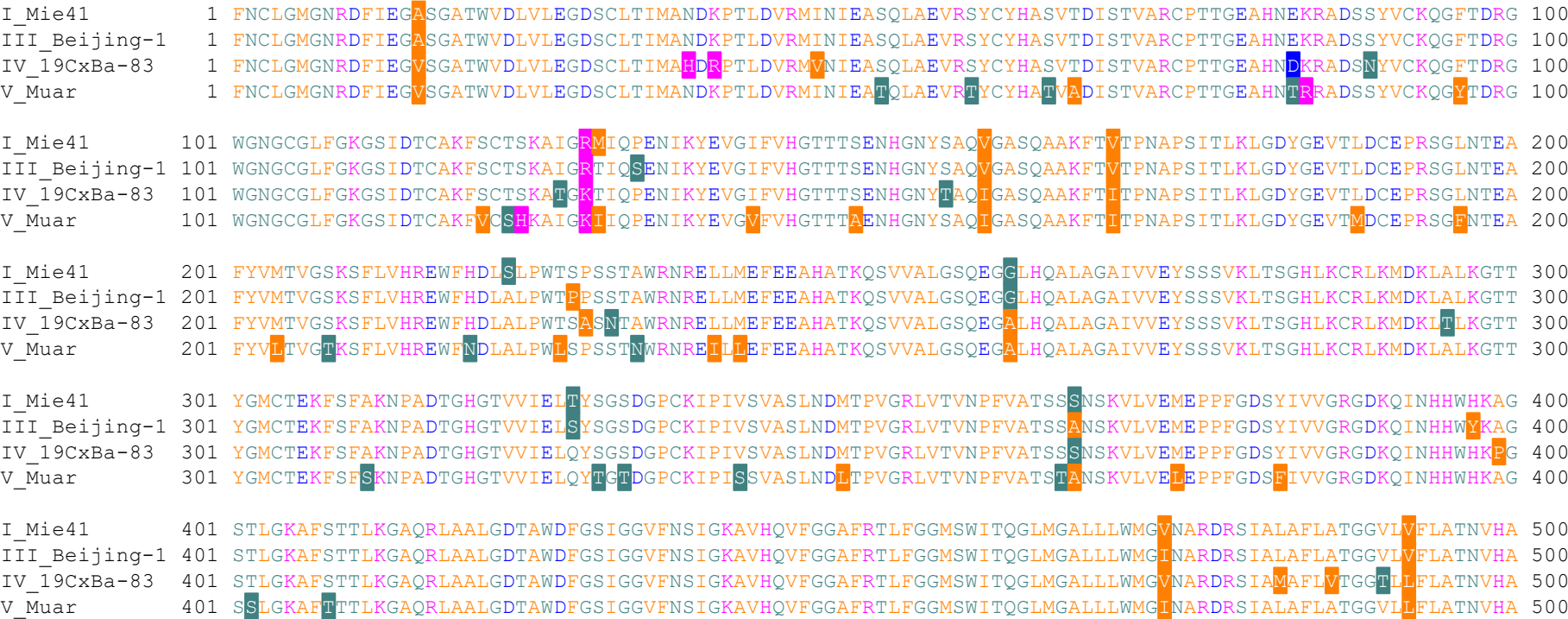
Figure S2. Body weight of mice inoculated with JEV strains (GI, GIV, GV) at two different doses (3×10^2 , 3×10^3 PFU/mouse) as shown in Figure 4. Colored lines indicate individual mice.

Figure S3

19CxBa-83-Cv_LC579814	1	FNCLGMGNRDFIEGVSGATWVDLVLEGDSCLTIMAHDRPTLDVRMINIEASQLAEVRSYCYHASVTDISTVARCPTTGEAHNDKRADSSYVCKQGFTDRG	100
sw-22-00722-11.Q1d_ON624132	1	FNCLGMGNRDFIEGVSGATWVDLVLEGDSCLTIMAHDRPTLDVRMINIEASQLAEVRSYCYHASVTDISTVARCPTTGEAHNDKRADSSYVCKQGFTDRG	100
Hu_Tiwi 2021_OM867669	1	FNCLGMGNRDFIEGVSGATWVDLVLEGDSCLTIMAHDRPTLDVRMINIEASQLAEVRSYCYHASVTDISTVARCPTTGEAHNDKRADSSYVCKQGFTDRG	100
Bali2019_MT253731	1	FNCLGMGNRDFIEGVSGATWVDLVLEGDSCLTIMAHDRPTLDVRMINIEASQLAEVRSYCYHASVTDISTVARCPTTGEAHNDKRADSSYVCKQGFTDRG	100
sw.Bali.93_LC461961	1	FNCLGMGNRDFIEGVSGATWVDLVLEGDSCLTIMAHDRPTLDVRMINIEASQLAEVRSYCYHASVTDISTVARCPTTGEAHNDKRADSSYVCKQGFTDRG	100
JKT6468_AY184212	1	FNCLGMGNRDFIEGVSGATWVDLVLEGDSCLTIMAHDRPTLDVRMINIEASQLAEVRSYCYHASVTDISTVARCPTTGEAHNDKRADSSYVCKQGFTDRG	100
19CxBa-83-Cv_LC579814	101	WGNCGCLFGKGSIDTCAKFSCTSKATGKTIQPENIKYEVGIFVHGTTTSENHGNYTAQIGASQAAKFTITPNAPSITLKLGDYGEVTLDCPRSGLNTEA	200
sw-22-00722-11.Q1d_ON624132	101	WGNCGCLFGKGSIDTCAKFSCTSKATGKTIQPENIKYEVGIFVHGTTTSENHGNYTAQIGASQAAKFTITPNAPSITLKLGDYGEVTLDCPRSGLNTEA	200
Hu_Tiwi 2021_OM867669	101	WGNCGCLFGKGSIDTCAKFSCTSKATGKTIQPENIKYEVGIFVHGTTTSENHGNYTAQIGASQAAKFTITPNAPSITLKLGDYGEVTLDCPRSGLNTEA	200
Bali2019_MT253731	101	WGNCGCLFGKGSIDTCAKFSCTSKATGKTIQPENIKYEVGIFVHGTTTSENHGNYTAQIGASQAAKFTITPNAPSITLKLGDYGEVTLDCPRSGLNTEA	200
sw.Bali.93_LC461961	101	WGNCGCLFGKGSIDTCAKFSCTSKATGKTIQPENIKYEVGIFVHGTTTSENHGNYTAQIGASQAAKFTITPNAPSITLKLGDYGEVTLDCPRSGLNTEA	200
JKT6468_AY184212	101	WGNCGCLFGKGSIDTCAKFSCTSKATGKTIQPENIKYEVGIFVHGTTTSENHGNYTAQIGASQAAKFTITPNAPSITLKLGDYGEVTLDCPRSGLNTEA	200
19CxBa-83-Cv_LC579814	201	FYVMTVGSKSFLVHREWFHDLALPWTSSNTAWRNRELLMEFEEAHATKQSVVALGSQEGALHQALAGAIIVVEYSSSVKLTSGHLKCRCLKMDKLTCLKGTT	300
sw-22-00722-11.Q1d_ON624132	201	FYVMTVGSKSFLVHREWFHDLALPWTSSNTAWRNRELLMEFEEAHATKQSVVALGSQEGALHQALAGAIIVVEYSSSVKLTSGHLKCRCLKMDKLTCLKGTT	300
Hu_Tiwi 2021_OM867669	201	FYVMTVGSKSFLVHREWFHDLALPWTSSNTAWRNRELLMEFEEAHATKQSVVALGSQEGALHQALAGAIIVVEYSSSVKLTSGHLKCRCLKMDKLTCLKGTT	300
Bali2019_MT253731	201	FYVMTVGSKSFLVHREWFHDLALPWTSSNTAWRNRELLMEFEEAHATKQSVVALGSQEGALHQALAGAIIVVEYSSSVKLTSGHLKCRCLKMDKLTCLKGTT	300
sw.Bali.93_LC461961	201	FYVMTVGSKSFLVHREWFHDLALPWTSSNTAWRNRELLMEFEEAHATKQSVVALGSQEGALHQALAGAIIVVEYSSSVKLTSGHLKCRCLKMDKLTCLKGTT	300
JKT6468_AY184212	201	FYVMTVGSKSFLVHREWFHDLALPWTSSNTAWRNRELLMEFEEAHATKQSVVALGSQEGALHQALAGAIIVVEYSSSVKLTSGHLKCRCLKMDKLTCLKGTT	300
19CxBa-83-Cv_LC579814	301	YGMCTEKFSFAKNPADTGHGTVVIELQYSGSDGPKIPIVSVASLNDMTPVGRLVTVNPFVATSSSNSKVLVEMEPFPGDSYIVVGRGDKQINHHWHKPG	400
sw-22-00722-11.Q1d_ON624132	301	YGMCTEKFSFAKNPADTGHGTVVIELQYSGSDGPKIPIVSVASLNDMTPVGRLVTVNPFVATSSSNSKVLVEMEPFPGDSYIVVGRGDKQINHHWHKPG	400
Hu_Tiwi 2021_OM867669	301	YGMCTEKFSFAKNPADTGHGTVVIELQYSGSDGPKIPIVSVASLNDMTPVGRLVTVNPFVATSSSNSKVLVEMEPFPGDSYIVVGRGDKQINHHWHKPG	400
Bali2019_MT253731	301	YGMCTEKFSFAKNPADTGHGTVVIELQYSGSDGPKIPIVSVASLNDMTPVGRLVTVNPFVATSSSNSKVLVEMEPFPGDSYIVVGRGDKQINHHWHKPG	400
sw.Bali.93_LC461961	301	YGMCTEKFSFAKNPADTGHGTVVIELQYSGSDGPKIPIVSVASLNDMTPVGRLVTVNPFVATSSSNSKVLVEMEPFPGDSYIVVGRGDKQINHHWHKPG	400
JKT6468_AY184212	301	YGMCTEKFSFAKNPADTGHGTVVIELLYSGSDGPKIPIVSVASLNDMTPVGRLVTVNPFVATSSSNSQVLVEMEPFPGDSYIVVGRGDKQINHHWHKPG	400
19CxBa-83-Cv_LC579814	401	STLKGAFSTTLKGAQRLAALGDTAWDFGSIIGGVFNSIGKAVHQVFVGGAFRTLFGGMSWITQGLMGALLLWMCVNARDRSIAMAFLVTGGTLLFLATNVHA	500
sw-22-00722-11.Q1d_ON624132	401	STLKGAFSTTLKGAQRLAALGDTAWDFGSIIGGVFNSIGKAVHQVFVGGAFRTLFGGMSWITQGLMGALLLWMCVNARDRSIAMAFLVTGGTLLFLATNVHA	500
Hu_Tiwi 2021_OM867669	401	STLKGAFSTTLKGAQRLAALGDTAWDFGSIIGGVFNSIGKAVHQVFVGGAFRTLFGGMSWITQGLMGALLLWMCVNARDRSIAMAFLVTGGTLLFLATNVHA	500
Bali2019_MT253731	401	STLKGAFSTTLKGAQRLAALGDTAWDFGSIIGGVFNSIGKAVHQVFVGGAFRTLFGGMSWITQGLMGALLLWMCVNARDRSIAMAFLVTGGTLLFLATNVHA	500
sw.Bali.93_LC461961	401	STLKGAFSTTLKGAQRLAALGDTAWDFGSIIGGVFNSIGKAVHQVFVGGAFRTLFGGMSWITQGLMGALLLWMCVNARDRSIAMAFLVTGGTLLFLATNVHA	500
JKT6468_AY184212	401	STLKGAFSTTLKGAQRLAALGDTAWDFGSIIGGVFNSIGKAVHQVFVGGAFRTLFGGMSWITQGLMGALLLWMCVNARDRSIAMAFLVTGGTLLFLATNVHA	500

Figure S3. Comparison of the complete amino acid sequence of E protein (500 residues) in GIV JEV strains.

Figure S4



Strain vs. strain	AA identity	Strain	AA difference (vs. GIII_Beijing-1)
Mie/41/2002 vs. 19CxBa-83-Cv	95.4%	Mie/41/2002	8/500 (1.6%)
Mie/41/2002 vs. Muar	91.6%	19CxBa-83-Cv	26/500 (5.2%)
19CxBa-83-Cv vs. Muar	90.6%	Muar	42/500 (8.4%)

Figure S4. Comparison of the complete amino acid sequence of E protein (500 residues) of Mie/41/2002 (GI), Beijing-1 (GIII, accession no. L48961), 19CxBa-83-Cv (GIV), and Muar (GV) strains of JEV.