

SUPPLEMENTARY TABLE 1. DESCRIPTION AND SEQUENCES OF PRIMERS USED FOR PCR AMPLIFICATION OF *env*, *nef* AND *int* GENES FROM SIVsmmFGB VIRUS STOCKS

Primer number	Primer coordinates ^a	Primer description	Primer sequence (5' to 3')
919	6419	<i>env</i> outer forward	TCTTAAAAAGGGCTTGGG
920	9383	<i>env</i> outer reverse	AAAATGAGACATGTCTAT
922	6464	<i>env</i> inner forward	AAGAAGAACTCCGAAGAAG
923	9282	<i>env</i> inner reverse	CATCCATGTTTTGTTGTC
915	8856	<i>nef</i> outer forward	ATATTCATTTCTGATCCGCC
916	9858	<i>nef</i> outer reverse	TCCCAGTACCTCCCCGTAAC
917	8885	<i>nef</i> inner forward	CGCCTCTTGACTTGGCT
918	9827	<i>nef</i> inner reverse	TGGAAAGTCCCTGCTGTC
898A	4122	<i>int</i> outer forward	AAAGGCAGGCTATGTAACAG
899A	5326	<i>int</i> outer reverse	GCTATGCCACTTCTCTAGCCTCCCC
900A	4156	<i>int</i> inner forward	AAGGCAAACCTTTGGAACAGA
901A	5295	<i>int</i> inner reverse	TTCCAAGTGGGACCACTATCC

^aPrimer coordinates based on PGm5.3 genome.⁴

SUPPLEMENTARY TABLE 2. MANTEL'S TEST RESULTS FOR INTER-TISSUE COMPARTMENTALIZATION OF *env* V1 REGIONS IN SIVsmmFGB-INFECTED PIGTAILED MACAQUES

<i>PFp1</i>	Pearson's correlation coefficient	p Value	<i>PGt1</i>	Pearson's correlation coefficient	p Value	<i>PHs1</i>	Pearson's correlation coefficient	p Value
A ^a ×B	0.082	0.001	A×B	0.141	0.001	A×B	0.136	0.001
A×C	0.033	0.183	A×C	0.201	0.001	A×C	0.080	0.001
A×F	-0.015	0.523	A×F	0.040	0.201	A×F	0.157	0.001
A×H	-0.047	0.045	A×H	0.037	0.221	A×H	0.021	0.513
A×M	-0.019	0.391	A×M	0.016	0.515	A×M	0.01	0.635
B×C	0.105	0.001	B×C	0.453	0.001	B×C	0.076	0.001
B×F	0.095	0.001	B×F	0.270	0.001	B×F	0.243	0.001
B×H	0.265	0.001	B×H	0.038	0.127	B×H	0.277	0.001
B×M	0.172	0.001	B×M	0.222	0.001	B×M	0.201	0.001
C×F	0.019	0.543	C×F	0.175	0.001	C×F	0.171	0.001
C×H	-0.019	0.571	C×H	0.283	0.001	C×H	0.059	0.053
C×M	0.009	0.761	C×M	0.067	0.005	C×M	0.052	0.079
F×H	0.057	0.087	F×H	0.107	0.001	F×H	0.191	0.001
F×M	0.032	0.295	F×M	-0.045	0.075	F×M	0.158	0.001
H×M	-0.029	0.333	H×M	0.093	0.001	H×M	0.079	0.025

<i>PKo1</i>	Pearson's correlation coefficient	p Value	<i>PQo1</i>	Pearson's correlation coefficient	p Value	<i>PQq1</i>	Pearson's correlation coefficient	p Value
A×B	0.028	0.283	A×B	ND ^b	ND	A×B	0.191	0.001
A×C	0.781	0.001	A×C	ND	ND	A×C	0.028	0.327
A×F	0.019	0.415	A×F	ND	ND	A×F	0.109	0.001
A×H	0.076	0.003	A×H	0.285	0.001	A×H	0.125	0.001
A×M	0.082	0.007	A×M	0.423	0.001	A×M	-0.013	0.479
B×C	0.957	0.001	B×C	ND	ND	B×C	0.024	0.383
B×F	-0.017	0.463	B×F	ND	ND	B×F	0.209	0.001
B×H	0.017	0.521	B×H	ND	ND	B×H	0.249	0.001
B×M	0.180	0.001	B×M	ND	ND	B×M	0.074	0.001
C×F	0.872	0.001	C×F	ND	ND	C×F	0.107	0.001
C×H	0.992	0.001	C×H	ND	ND	C×H	0.123	0.001
C×M	0.845	0.001	C×M	ND	ND	C×M	0.061	0.005
F×H	0.009	0.701	F×H	ND	ND	F×H	0.313	0.001
F×M	0.116	0.001	F×M	ND	ND	F×M	0.009	0.631
H×M	0.276	0.001	H×M	0.710	0.001	H×M	0.231	0.001

^aA, axillary lymph node; B=basal ganglia; C=cerebellum; F=midfrontal cortex; H=hippocampus; M=mesenteric lymph node.

^bND=Not determined due to absence of data from one or more PQo1 tissues.

SUPPLEMENTARY TABLE 3. MANTEL'S TEST RESULTS FOR INTER-TISSUE COMPARTMENTALIZATION OF *nef* IN SIVsmmFGb-INFECTED PIGTAILED MACAQUES

<i>PFp1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>	<i>PGt1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>	<i>PHs1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>
A ^a ×B	0.549	0.001	A×B	0.368	0.001	A×B	0.250	0.001
A×C	0.084	0.009	A×C	0.082	0.009	A×C	0.324	0.001
A×F	0.139	0.001	A×F	0.049	0.085	A×F	0.314	0.001
A×H	0.120	0.001	A×H	0.091	0.003	A×H	0.407	0.001
A×M	0.027	0.389	A×M	0.029	0.379	A×M	0.033	0.247
B×C	0.493	0.001	B×C	0.397	0.001	B×C	0.590	0.001
B×F	0.473	0.001	B×F	0.224	0.001	B×F	0.501	0.001
B×H	0.586	0.001	B×H	0.387	0.001	B×H	0.482	0.001
B×M	0.394	0.001	B×M	0.420	0.001	B×M	0.331	0.001
C×F	0.114	0.003	C×F	0.084	0.003	C×F	0.408	0.001
C×H	0.115	0.005	C×H	0.072	0.007	C×H	0.555	0.001
C×M	0.061	0.077	C×M	0.068	0.013	C×M	0.155	0.001
F×H	0.147	0.001	F×H	0.137	0.001	F×H	0.413	0.001
F×M	0.085	0.019	F×M	0.082	0.003	F×M	0.086	0.003
H×M	0.112	0.001	H×M	0.056	0.053	H×M	0.193	0.001

<i>PKo1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>	<i>PQo1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>	<i>PQq1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>
A×B	0.732	0.001	A×B	ND ^b	ND	A×B	0.159	0.001
A×C	0.754	0.001	A×C	0.560	0.001	A×C	0.175	0.001
A×F	0.346	0.001	A×F	ND	ND	A×F	0.087	0.011
A×H	0.594	0.001	A×H ^c	0.360	0.001	A×H	0.133	0.001
A×M	0.809	0.001	A×M	0.450	0.001	A×M	0.025	0.361
B×C	0.985	0.001	B×C	ND	ND	B×C	0.302	0.001
B×F	0.600	0.001	B×F	ND	ND	B×F	0.255	0.001
B×H	0.902	0.001	B×H	ND	ND	B×H	0.193	0.001
B×M	0.989	0.001	B×M	ND	ND	B×M	0.105	0.001
C×F	0.695	0.001	C×F	ND	ND	C×F	0.343	0.001
C×H	0.834	0.001	C×H ^c	0.888	0.001	C×H	0.306	0.001
C×M	0.981	0.001	C×M	0.425	0.001	C×M	0.204	0.001
F×H	0.548	0.001	F×H	ND	ND	F×H	0.248	0.001
F×M	0.693	0.001	F×M	ND	ND	F×M	0.245	0.001
H×M	0.900	0.001	H×M ^c	0.711	0.001	H×M	0.078	0.019

^aA = axillary lymph node; B = basal ganglia; C = cerebellum; F = midfrontal cortex; H = hippocampus; M = mesenteric lymph node.

^bND = not determined due to absence of data from one or more PQo1 tissues.

^cOnly 19 sequences obtained for PQo1 hippocampus *nef*.

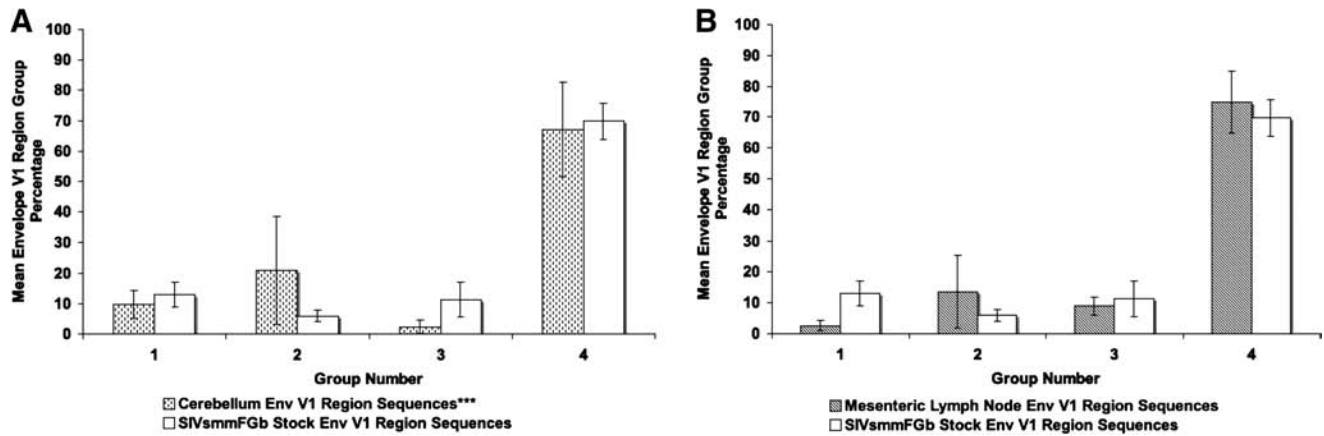
SUPPLEMENTARY TABLE 4. MANTEL'S TEST RESULTS FOR INTER-TISSUE COMPARTMENTALIZATION OF *int* IN SIVsmmFGb-INFECTED PIGTAILED MACAQUES

<i>PFp1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>	<i>PGt1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>	<i>PHs1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>
A ^a ×B	0.220	0.001	A×B	0.135	0.001	A×B	0.117	0.001
A×C	0.007	0.789	A×C	0.226	0.001	A×C	0.055	0.091
A×F	0.291	0.001	A×F	0.086	0.003	A×F	0.087	0.005
A×H	0.115	0.001	A×H	0.446	0.001	A×H	0.058	0.047
A×M	-0.037	0.271	A×M	0.006	0.917	A×M	0.040	0.093
B×C	0.151	0.001	B×C	0.232	0.001	B×C	0.301	0.001
B×F	0.489	0.001	B×F	0.229	0.001	B×F	0.289	0.001
B×H	0.231	0.001	B×H	0.681	0.001	B×H	0.163	0.001
B×M	0.136	0.001	B×M	0.176	0.001	B×M	0.133	0.001
C×F	0.200	0.001	C×F	0.226	0.001	C×F	0.160	0.001
C×H	0.077	0.001	C×H	0.706	0.001	C×H	0.095	0.001
C×M	-0.083	<0.0001	C×M	0.213	0.001	C×M	0.010	0.741
F×H	0.335	0.001	F×H	0.431	0.001	F×H	0.097	0.003
F×M	0.395	0.001	F×M	0.052	0.053	F×M	0.137	0.001
H×M	0.063	0.063	H×M	0.535	0.001	H×M	0.040	0.143

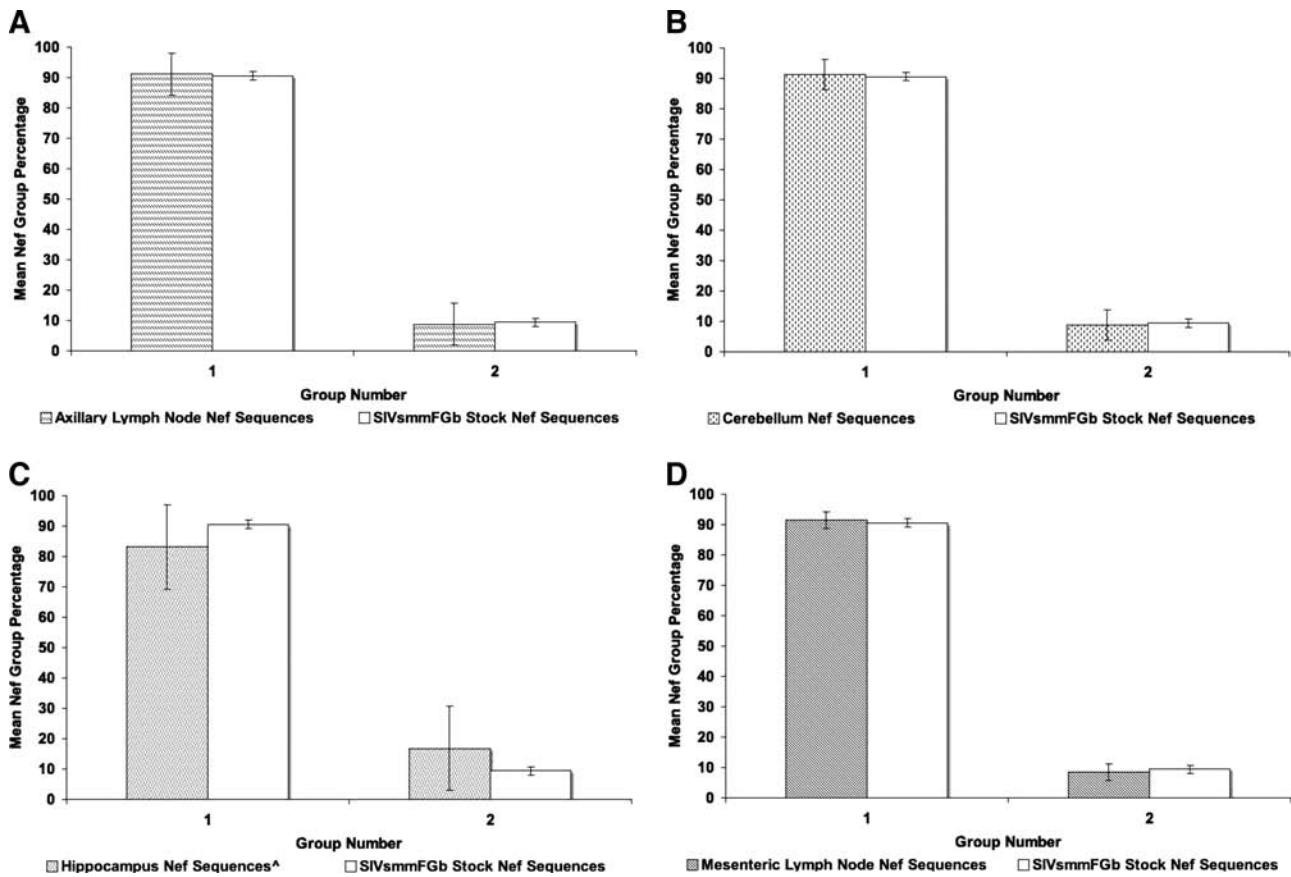
<i>PKo1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>	<i>PQo1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>	<i>PQq1</i>	<i>Pearson's correlation coefficient</i>	<i>p Value</i>
A×B	0.395	0.001	A×B	ND ^b	ND	A×B	0.093	0.001
A×C	0.248	0.001	A×C	ND	ND	A×C	0.121	0.001
A×F	0.114	0.005	A×F	0.504	0.001	A×F	0.370	0.001
A×H	0.640	0.001	A×H	0.710	0.001	A×H	0.280	0.001
A×M	0.236	0.001	A×M	0.052	0.075	A×M	0.063	0.017
B×C	0.484	0.001	B×C	ND	ND	B×C	0.106	0.001
B×F	0.500	0.001	B×F	ND	ND	B×F	0.308	0.001
B×H	0.922	0.001	B×H	ND	ND	B×H	0.317	0.001
B×M	0.495	0.001	B×M	ND	ND	B×M	0.123	0.001
C×F	0.322	0.001	C×F	ND	ND	C×F	0.353	0.001
C×H	0.568	0.001	C×H	ND	ND	C×H	0.281	0.001
C×M	0.365	0.001	C×M	ND	ND	C×M	0.071	0.003
F×H	0.612	0.001	F×H	0.970	0.001	F×H	0.612	0.001
F×M	0.348	0.001	F×M	0.394	0.001	F×M	0.347	0.001
H×M	0.654	0.001	H×M	0.619	0.001	H×M	0.218	0.001

^aA = axillary lymph node; B = basal ganglia; C = cerebellum; F = midfrontal cortex; H = hippocampus; M = mesenteric lymph node.

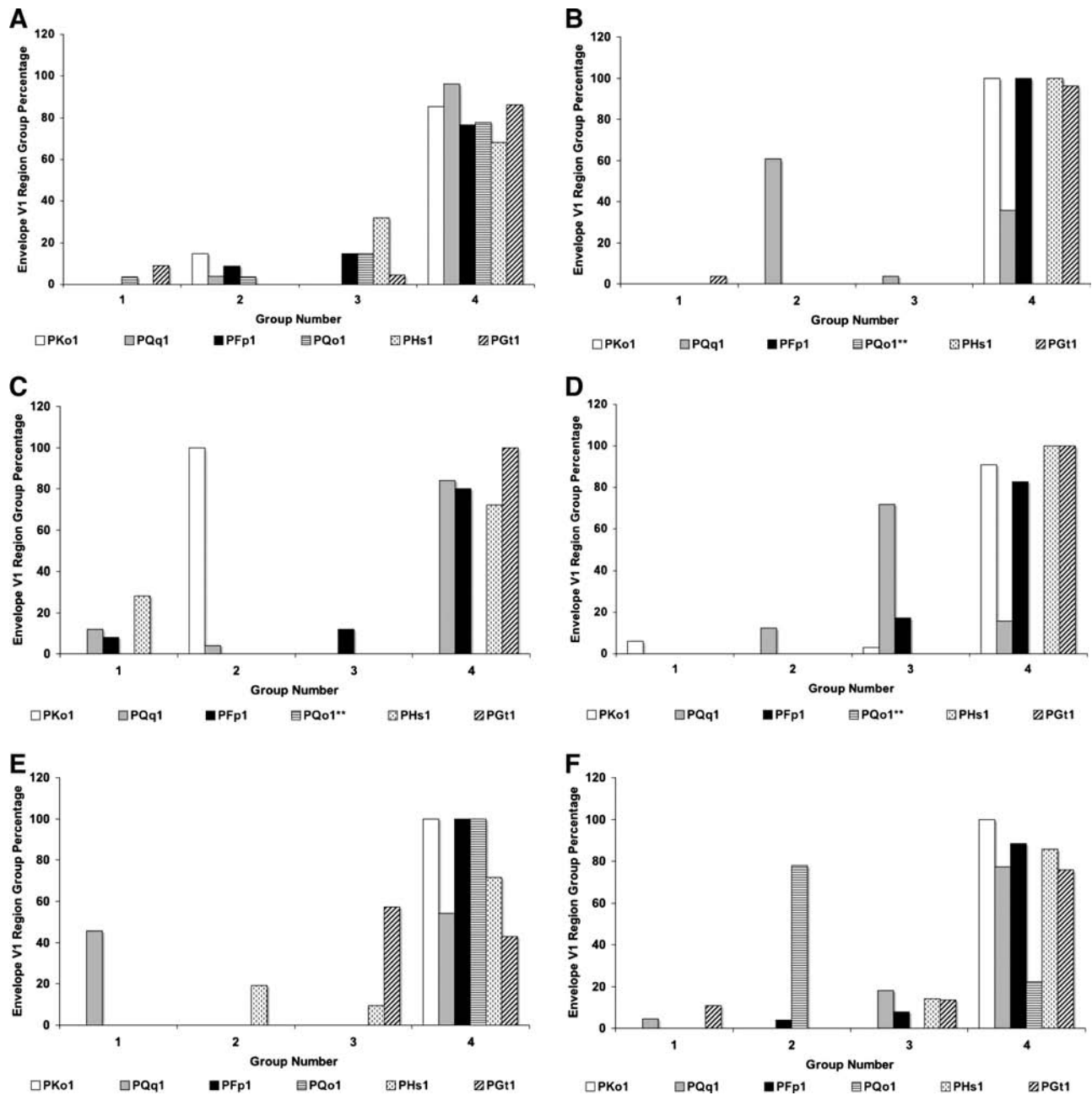
^bND = Not determined due to absence of data from one or more PQo1 tissues.



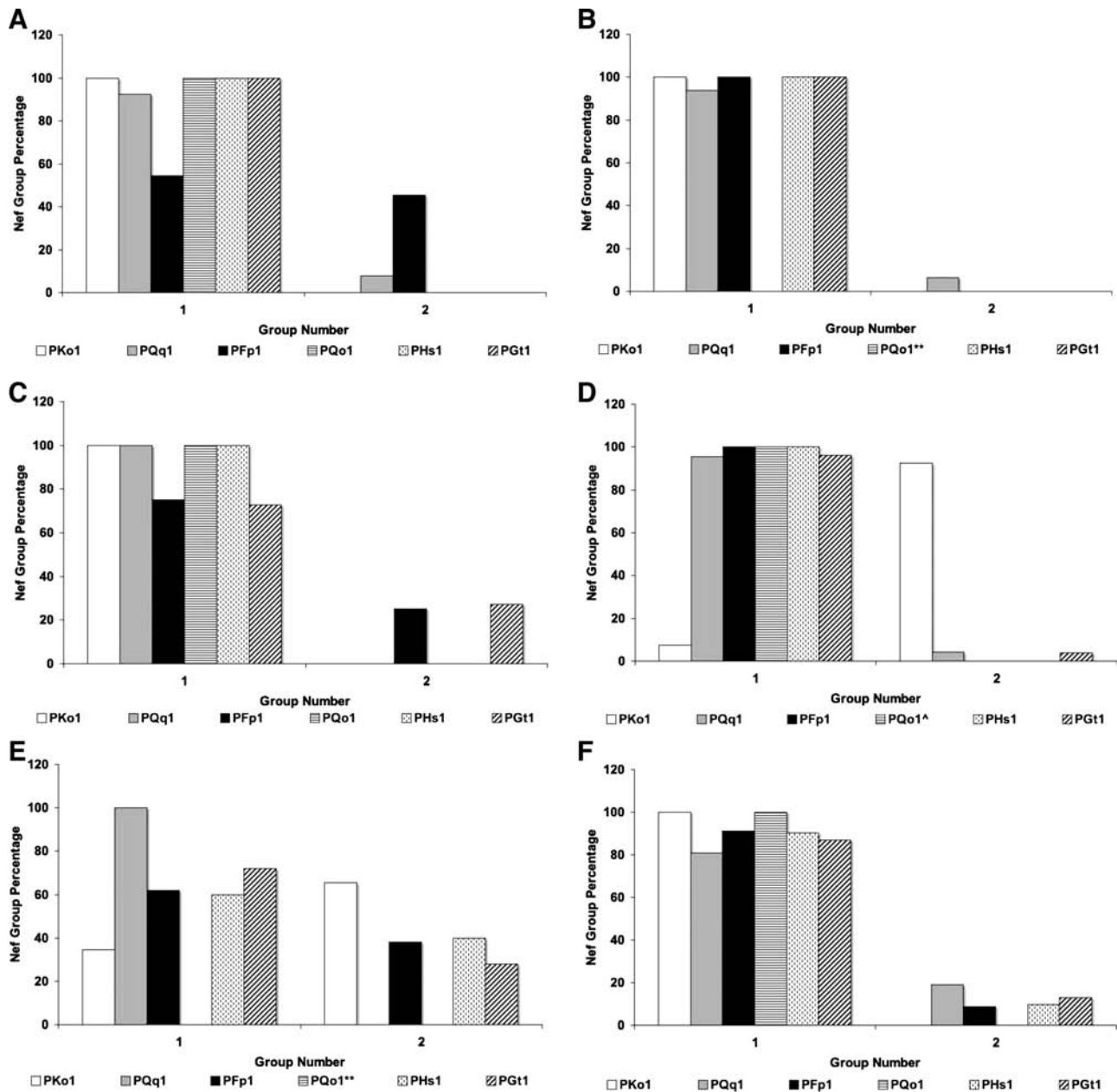
SUPPLEMENTARY FIG. 1. Comparison of Env V1 region group percentages between tissues harvested from pigtailed macaques 5 or 7 days postinfection and SIVsmmFGb stock virus. Env V1 amino acid sequences obtained from the SIVsmmFGb stock virus were aligned and grouped as shown in Fig. 1. Env V1 amino acid sequences from tissues were grouped as described in Materials and Methods. The percentage of sequences in each group from each tissue was determined for each animal and averaged to yield a mean percentage for each group in each tissue across all animals. The percentage of each group in the SIVsmmFGb stock virus was compared statistically with the mean percentage of each group in the tissues, using the Mann-Whitney rank-sum test as described in Materials and Methods. Statistically significant differences ($p < 0.05$) are noted. Error bars represent 1 standard error. Results for (A) cerebellum and (B) mesenteric lymph node; axillary lymph node, basal ganglia, midfrontal cortex, and hippocampus results appear in Fig. 3. Tissues indicated by asterisks (***) lack data from PQo1; results are thus the average of the remaining five animals.



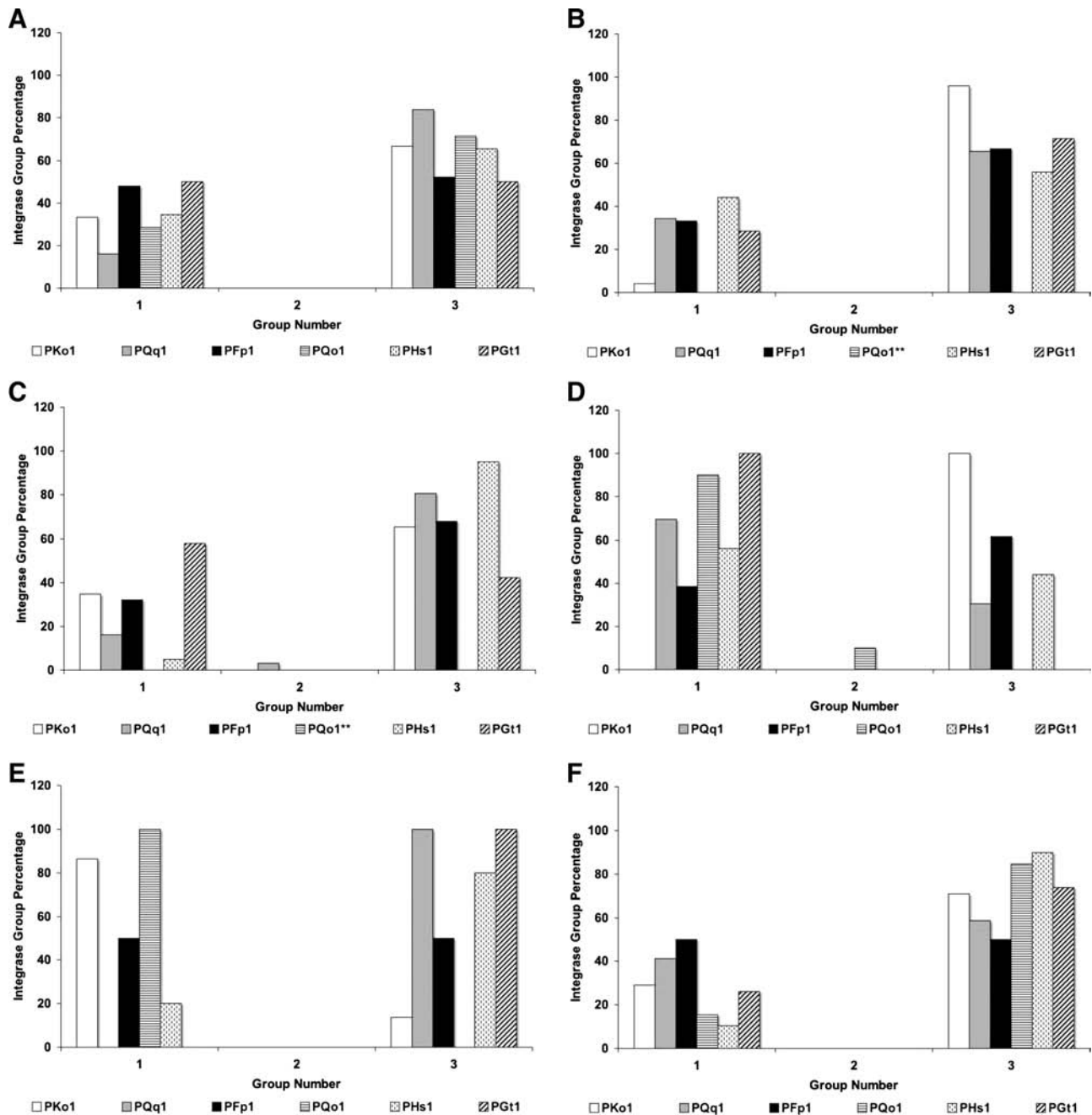
SUPPLEMENTARY FIG. 2. Comparison of Nef group percentages between tissues harvested from pigtailed macaques 5 or 7 days postinfection and SIVsmmFGb stock virus. Grouping of stock virus and tissue-derived sequences, as well as statistical comparisons, were performed as described in Figs. 1 and 3 and Materials and Methods. Statistically significant differences ($p < 0.05$) are noted. Error bars represent 1 standard error. Results for (A) axillary lymph node, (B) cerebellum, (C) hippocampus, and (D) mesenteric lymph node; basal ganglia and midfrontal cortex results are shown in Fig. 4. Tissues indicated by asterisks (***) lack data from PQo1; results are thus the average of the remaining five animals.



SUPPLEMENTARY FIG. 3. Comparison of Env V1 region group percentages obtained from tissues harvested from pig-tailed macaques 5 or 7 days postinfection. Envelope V1 amino acid sequences obtained from the SIVsmmFGb stock virus were aligned and grouped as shown in Fig. 1. Env V1 amino acid sequences from tissues were aligned with SIVsmmFGb stock virus Env V1 consensus sequences and their phylogeny assessed, via neighbor-joining trees, to determine which stock virus group the sequences most closely matched. The percentage of sequences in each group from each tissue was determined for each animal. Results are shown for (A) axillary lymph node, (B) basal ganglia, (C) cerebellum, (D) midfrontal cortex, (E) hippocampus, and (F) mesenteric lymph node. Tissues indicated by asterisks (**) lack data from PQo1.



SUPPLEMENTARY FIG. 4. Comparison of Nef group percentages obtained from tissues harvested from pigtailed macaques 5 or 7 days postinfection. Nef amino acid sequences obtained from the SIVsmmFGb stock virus were aligned and grouped as shown in Fig. 1. Nef amino acid sequences from tissues were aligned with SIVsmmFGb stock virus Nef consensus sequences and their phylogeny assessed, via neighbor-joining trees, to determine which stock virus group the sequences most closely matched. Percentage of sequences in each group from each tissue was determined for each animal. Results shown for (A) axillary lymph node, (B) basal ganglia, (C) cerebellum, (D) hippocampus, (E) midfrontal cortex, and (F) mesenteric lymph node. ^Only 19 nef sequences amplified from this tissue for PQo1. Tissues indicated by asterisks (**) lack data from PQo1.



SUPPLEMENTARY FIG. 5. Comparison of Int group percentages obtained from tissues harvested from pigtailed macaques 5 or 7 days postinfection. Int amino acid sequences obtained from the SIVsmmFGb stock virus were aligned and grouped as shown in Fig. 1. Int amino acid sequences from tissues were aligned with SIVsmmFGb stock virus Int consensus sequences and their phylogeny assessed, via neighbor-joining trees, to determine which stock virus group the sequences most closely matched. Percentage of sequences in each group from each tissue was determined for each animal. Results shown for (A) axillary lymph node, (B) basal ganglia, (C) cerebellum, (D) hippocampus, (E) midfrontal cortex, and (F) mesenteric lymph node. Tissues indicated by asterisks (**) lack data from PQo1.