

**S4 Table. Frequency of intrapatient amino acid mutations in two E1 amplicons and the viral haplotypes in which they occur**

Amino acid mutation*	Veracruz_1	Colima_2	Guerrero_3	Veracruz_4	Colima_5	Chiapas_6	Chiapas_7	Chiapas_8	Guerrero_9	Colima_10	Oaxaca_11	Oaxaca_12	Colima_13	Chiapas_14	Guerrero_15	Guerrero_16	Chiapas_17	Guerrero_18	Oaxaca_19	Veracruz_20	Veracruz_21	Oaxaca_22	Colima_23	Veracruz_24	Oaxaca_25	Haplotype			
C96F																									0.003	COF 1_31			
I177F																									0.002	COF 1_42			
Y185H									0.003		0.002	0.002														0.002	COF 1_23		
Y189D																									0.002	COF 1_50			
P191T	0.022	0.029	0.031			0.026	0.027	0.031	0.029	0.025	0.025	0.024	0.025	0.025	0.029	0.025	0.028	0.03	0.027	0.027	0.04	0.03	0.023	0.038	0.032	COF 1_5, COF 63_1, COF 1_47, COF 1_43			
P191R																									0.002	COF 1_44			
P191H																									0.002	COF 1_49			
P191S																									0.002	COF 1_54			
P191A		0.006						0.013		0.011	0.01	0.011	0.01	0.011	0.011	0.01	0.01	0.011							0.011	COF 1_10, COF 1_67, COF 1_41			
F192S											0.002													0.002	COF 1_29				
F192C	0.035	0.037	0.034			0.026	0.026	0.029	0.035	0.028	0.026	0.026	0.033	0.026	0.032	0.032	0.03	0.03	0.036	0.043	0.028	0.041	0.034	0.032	0.041	0.029	COF 1_3, COF 1_58, COF 1_46, COF 1_43		
F192V	0.041	0.051	0.054			0.071	0.042	0.046	0.047	0.047	0.048	0.048	0.05	0.044	0.045	0.051	0.049	0.049	0.056	0.066	0.068	0.064	0.057	0.073	0.064	0.06	COF 1_2, COF 1_22, COF 1_66, COF 1_52, COF 1_47, COF 1_41, COF 1_51, COF 1_40, COF 1_36		
F192I																									0.002	COF 1_48			
F192Y											0.002													0.002	COF 1_28				
F192L								0.003		0.003	0.003	0.003													0.004	COF 1_19			
G193D																									0.002	COF 1_35			
A194G											0.002	0.002												0.003	COF 1_32				
A194E								0.009		0.01	0.009	0.01	0.006	0.011	0.009	0.011	0.009	0.005							0.007	COF 1_11, COF 1_65			
G195R																									0.002	COF 1_37			
R196S											0.002													0.002	COF 1_30				
R196G																									0.002	COF 1_56			
P197T								0.005		0.005	0.006	0.004	0.005		0.005	0.006	0.004	0.004							0.005	COF 1_12			
P197Q	0.021	0.013						0.02	0.015	0.018	0.017	0.018	0.021	0.021	0.02	0.018	0.019	0.017	0.017	0.017	0.016	0.015	0.023		0.015	0.019	COF 1_7, COF 1_60, COF 1_51		
G198V												0.002												0.002	COF 1_34				
Q199K																									0.002	COF 1_53			
Q199H								0.006		0.007	0.007	0.007	0.008		0.007	0.007	0.008	0.006	0.009						0.007	COF 1_13			
F200I																									0.002	COF 1_55			
F200V	0.027	0.034	0.038			0.028	0.03	0.037	0.041	0.036	0.035	0.038	0.034	0.03	0.032	0.038	0.034	0.033	0.038	0.045	0.046	0.046	0.038	0.032	0.045	0.037	COF 1_4, COF 1_22, COF 1_59, COF 1_46, COF 1_38		
F200C		0.02	0.013					0.023	0.018	0.015	0.016	0.016	0.015	0.019	0.018	0.019	0.017	0.018	0.019	0.019	0.017	0.015	0.014		0.014	0.019	COF 1_8, COF 1_64, COF 1_52		
F200L										0.003			0.005	0.002											0.006	COF 1_21			
D202E																									0.002	COF 1_45			
I203S		0.012	0.012						0.016	0.013	0.014	0.015	0.013	0.015	0.013	0.015	0.016	0.015	0.016	0.011	0.015	0.017	0.028	0.021	0.017	0.015	0.014	COF 1_9, COF 1_57, COF 1_36	
I203T									0.003		0.003	0.003	0.003	0.003		0.004									0.003	COF 1_17			
Q204L									0.006		0.008	0.007	0.009	0.008		0.007	0.008	0.007	0.008	0.01				0.008		COF 1_14			
Q204H								0.003		0.005	0.003	0.004	0.004		0.004			0.004		0.011					0.004	COF 1_20			

<b>Q204P</b>						0.003		0.003	0.003	0.003	0.003		0.004		0.004					0.003	COF 1_16		
<b>S205R</b>	0.026	0.026	0.023		0.027	0.028	0.032	0.023	0.033	0.031	0.029	0.029	0.03	0.037	0.032	0.032	0.025	0.026	0.024	0.032	0.03	COF 1_6, COF 1_62, COF 1_40, COF 1_38	
<b>S205G</b>										0.002											0.001	COF 1_26	
<b>T207M</b>													0.967									COF 1_61, COF 1_66, COF 1_58, COF 1_67, COF 1_59, COF 1_63, COF 1_64, COF 1_60, COF 1_65, COF 1_62, COF 1_57	
<b>E209A</b>						0.003		0.003	0.002	0.003			0.003								0.003	COF 1_18	
<b>S210R</b>						0.003		0.003	0.003	0.003			0.003		0.004						0.004	COF 1_15	
<b>Y214X</b>								0.002													0.002	COF 1_27	
<b>Q218P</b>								0.002		0.003											0.001	COF 1_25	
<b>Q218H</b>									0.002												0.001	COF 1_33	
<b>L219R</b>						0.003		0.002													0.002	COF 1_24	
<b>V220G</b>																					0.002	COF 1_39	
<b>V291I</b>													0.692									CIF 2_13	
<b>I339F</b>	0.175	0.101		0.192		0.054	0.048	0.047	0.044	0.042	0.055	0.059	0.05		0.052	0.073	0.06					0.043	CIF 2_2
<b>N349K</b>									0.009				0.009									0.006	CIF 2_16
<b>S350A</b>		0.064				0.045	0.05	0.05	0.051	0.049	0.051	0.045	0.045		0.048	0.045	0.052					0.05	CIF 2_4
<b>L352W</b>													0.009									0.008	CIF 2_17
<b>Q353K</b>						0.03	0.032	0.032	0.025	0.028	0.027	0.024	0.03		0.026	0.027	0.03					0.027	CIF 2_7
<b>Q353P</b>						0.014	0.014		0.012	0.013		0.01			0.017							0.01	CIF 2_11
<b>I354T</b>								0.014	0.012	0.012		0.01										0.008	CIF 2_12
<b>I354S</b>						0.024	0.022	0.029	0.025	0.028	0.027	0.026	0.023		0.025	0.029	0.031					0.022	CIF 2_6
<b>I354L</b>						0.019	0.016	0.016	0.017	0.018	0.021	0.017	0.019		0.02							0.012	CIF 2_10
<b>S355P</b>									0.01	0.011		0.01										0.011	CIF 2_15
<b>S355A</b>						0.023	0.027	0.027	0.021	0.021	0.019	0.022	0.025		0.023	0.022	0.025					0.02	CIF 2_9
<b>F356C</b>		0.052				0.045	0.048	0.058	0.048	0.049	0.054	0.047	0.052		0.047	0.057	0.055					0.052	CIF 2_3
<b>F356S</b>						0.018	0.023	0.02	0.02	0.023	0.025	0.017	0.021		0.014	0.022	0.022					0.016	CIF 2_8
<b>F356L</b>						0.033	0.038	0.033	0.035	0.036	0.035	0.032	0.034		0.037	0.041	0.034					0.031	CIF 2_5
<b>T358P</b>						0.011		0.009			0.009											0.007	CIF 2_14
<b>S371A</b>											0.009											0.008	CIF 2_18

\*Position relative to start of E1 protein. Mutations present in the consensus sequence are in bold.

