HIVDB algV8_8 => algV8_9 Changes

At least 200 patterns were affected. Due to 17 changed rules listed below:

- Added new rule **Y181CIV + H221Y**, with scores 10 (DOR), 0 (EFV), 0 (ETR), 0 (NVP), 10 (RPV).
- Added new rule **V106I + G190S**, with scores 10 (DOR), 0 (EFV), 0 (ETR), 0 (NVP), 0 (RPV).
- Added new rule **V106I + Y181C**, with scores 10 (DOR), 0 (EFV), 0 (ETR), 0 (NVP), 10 (RPV).
- Added new rule **P236L**, with scores 15 (DOR), 0 (EFV), 0 (ETR), 0 (NVP), 0 (RPV).
- Changed scores of rule **V106I**: 15 to 10 (DOR).
- Changed scores of rule **V106M**: 30 to 50 (DOR).
- Changed scores of rule **V108I**: 10 to 15 (DOR).
- Changed scores of rule **E138K**: 0 to 10 (DOR).
- Changed scores of rule **V179F**: 0 to 10 (DOR).
- Changed scores of rule **G190Q**: 60 to 30 (DOR).
- Changed scores of rule **H221Y**: 10 to 15 (DOR).
- Changed scores of rule **F227I**: 30 to 50 (DOR).
- Changed scores of rule **F227L**: 30 to 50 (DOR).
- Changed scores of rule **F227V**: 30 to 50 (DOR).
- Deleted rule **Y181C + G190A**.
- Changed scores of rule **Y181C + G190ACSTV**: 0 to 20 (DOR).
- Deleted rule **Y181C + G190CSTV**.

pattern	count	DOR	EFV	ETR	NVP	RPV
V106I	1696	15 => 10	0	10	10	10
K103N + V108I	523	10 => 15	70	0	75	0
V108I	414	10 => 15	10	0	15	0
Y181C + G190A	353	30	75	50	120	70
Y181C + H221Y	287	20 => 35	40	40	75	60 => 70
K103N + Y181C + G190A	243	40	135	50	180	70
K103N + Y181C + H221Y	234	30 => 45	100	40	135	60 => 70
K103N + V106M	204	30 => 50	120	0	120	0
K101E + Y181C + G190A	193	50	95	75	155	115
V108I + Y181C + H221Y	171	40 => 60	50	40	90	60 => 70
V108I + Y181C	160	30 => 35	40	30	75	45
H221Y	129	10 => 15	10	10	15	15
V106A + F227L	124	105 => 125	75	0	90	0
V106I + Y188L	124	75 => 70	60	20	70	70
K103N + H221Y	98	10 => 15	70	10	75	15
K103N + V108I + P225H	94	40 => 45	115	0	120	0
K103N + V108I + H221Y	92	20 => 30	80	10	90	15
E138K	91	0 => 10	10	10	10	45
K103N + V106I	88	15 => 10	60	10	70	10
K101E + Y181C + G190S	83	70 => 80	110	75	155	115
L100I + K103N + H221Y	81	40 => 45	130	40	135	75
K103N + V108I + Y181C	80	40 => 45	100	30	135	45

pattern	count	DOR	EFV	ETR	NVP	RPV
V106M	73	30 => 50	60	0	60	0
Y181C + G190S	72	50 => 60	90	50	120	70
K103N + V108I + Y181C + H221Y	67	50 => 70	110	40	150	60 => 70
Y181C + G190A + H221Y	66	40 => 55	85	60	135	85 => 95
V106M + G190A	65	30 => 50	105	10	120	15
K103R + V106M + V179D	61	30 => 50	90	10	90	25
G190Q	60	60 => 30	60	45	60	45
K103N + V108I + K238T	60	10 => 15	100	0	105	0
V106M + Y188C	58	40 => 60	120	0	120	0
A98G + K103N + V108I	56	25 => 30	85	10	105	15
V106M + V179D	55	30 => 50	70	10	70	10
K101E + V108I + Y181C + G190A	53	70 => 75	105	75	170	115
K101E + V106M + G190A	45	50 => 70	120	30	150	60
K103S + V106M	45	30 => 50	105	0	120	0
V108I + Y181C + G190A	45	50 => 55	85	50	135	70
A98G + Y181C + G190A	44	50	95	65	155	90
F227L	44	30 => 50	15	0	30	0
K103N + Y181C + G190A + H221Y	44	50 => 65	145	60	195	85 => 95
K101H + Y181C + G190A	43	30	85	60	135	80
V106M + V179D + F227L	42	60 => 100	85	10	100	10
V108I + Y181C + G190A + H221Y	42	60 => 80	95	60	150	85 => 95
A98G + K103N + Y181C + G190A	41	60	155	65	215	90
V106M + Y188L	41	90 => 110	120	10	120	60
K103N + V108I + Y181C + G190A + H221Y	35	70 => 90	155	60	210	85 => 95
V106M + F227L	35	60 => 100	75	0	90	0
L100I + K103N + V108I	34	40 => 45	130	30	135	60
A98G + K101E + Y181C + G190A	33	70	115	90	190	135
K101E + V108I + Y181C + G190A + H221Y	33	80 => 100	115	85	185	130 => 140
V106A + G190A + F227L	33	105 => 125	120	10	150	15
K103N + V108I + M230L	30	70 => 75	115	30	135	60
V106I + V179D	30	15 => 10	10	20	20	20
A98G + Y181C + H221Y	29	40 => 55	60	55	110	80 => 90
K103N + V108I + N348I	28	10 => 15	70	0	90	0
V106I + Y181C	27	25 => 30	30	40	70	55 => 65

pattern	count	DOR	EFV	ETR	NVP	RPV
A98G + V106I + Y188L	26	90 => 85	75	30	100	85
A98G + V108I + Y181C	26	50 => 55	60	45	110	65
V106M + G190A + F227L	26	60 => 100	120	10	150	15
K101E + V106I + G190S	24	65 => 70	75	40	100	70
V106I + Y181C + G190A	24	45 => 50	75	60	130	80 => 90
K101E + Y181C + G190A + H221Y	23	60 => 75	105	85	170	130 => 140
V106I + E138A	23	15 => 10	0	20	10	25
A98G + K101E + V108I + Y181C + G190A	22	90 => 95	125	90	205	135
K103N + V106M + F227L	21	60 => 100	135	0	150	0
A98G + V108I + Y181C + H221Y	20	60 => 80	70	55	125	80 => 90
K103N + V106I + G190A	20	15 => 10	105	20	130	25
V106I + G190A	20	15 => 10	45	20	70	25
K101E + V106I + G190A	19	35 => 30	60	40	100	70
K101H + Y181C + G190S	19	50 => 60	100	60	135	80
K103N + V106M + E138A	19	30 => 50	120	10	120	15
K103N + V108I + G190A	19	10 => 15	115	10	135	15
V106I + V108I	19	25	10	10	25	10
K101E + V106M + F227L	18	75 => 115	90	15	120	45
K103N + V106A + F227L	18	105 => 125	135	0	150	0
K103S + Y181C + G190A	18	30	120	50	180	70
K101E + E138K	17	15 => 25	25	25	40	90
K101E + V106M	17	45 => 65	75	15	90	45
K103N + V108I + Y181C + G190A	17	60 => 65	145	50	195	70
V106I + Y181C + H221Y	17	35 => 55	40	50	85	70 => 90
Y188L + H221Y	17	70 => 75	70	20	75	75
K101E + V106I + Y181C + G190S	16	85 => 110	110	85	165	125 => 135
K101H + V108I + Y181C + G190A	16	50 => 55	95	60	150	80
K103N + V108I + P225H + K238T	16	40 => 45	145	0	150	0
V106I + V179E + Y188L	16	75 => 70	70	30	80	80
A98G + K103N + V108I + Y181C	15	60 => 65	120	45	170	65
G190A + H221Y	15	10 => 15	55	20	75	30
K101E + K103N + Y181C + G190A	15	60	155	75	215	115
K101E + V108I + G190A	15	30 => 35	70	30	105	60

pattern	count	DOR	EFV	ETR	NVP	RPV
K103N + V108I + H221Y + P225H	15	50 => 60	125	10	135	15
V106M + Y181C	15	40 => 60	90	30	120	45
K101E + K103N + V108I	14	25 => 30	85	15	105	45
K101E + Y181C + G190S + H221Y	14	80 => 105	120	85	170	130 => 140
K103N + V106M + Y181C	14	50 => 70	150	30	180	45
V108I + G190A	14	10 => 15	55	10	75	15
K103N + G190A + H221Y	13	10 => 15	115	20	135	30
K103N + H221Y + L234I	13	40 => 45	70	10	75	15
V106I + V179D + Y188L	13	75 => 70	70	30	80	80
Y181I + H221Y	13	30 => 45	40	70	75	75 => 85
Y181V + H221Y	13	30 => 45	40	70	75	75 => 85
A98G + K101E + V108I + Y181C + G190A + H221Y	12	100 => 120	135	100	220	150 => 160
A98G + V106I	12	30 => 25	15	20	40	25
A98G + V108I	12	25 => 30	25	10	45	15
K101E + V106M + E138A + G190A	12	50 => 70	120	40	150	75
K101E + V106M + G190A + F227L	12	80 => 120	135	30	180	60
K101E + V106M + Y181C + G190A	12	80 => 100	155	75	215	115
K101E + Y181C + H221Y	12	35 => 50	60	60	110	105 => 115
K103N + V108I + E138Q	12	10 => 15	80	10	85	15
K103N + V108I + K238N	12	10 => 15	80	0	85	0
K103N + V108I + Y181C + H221Y + K238T	12	50 => 70	140	40	180	60 => 70
L100I + K103N + E138K	12	30 => 40	130	40	130	105
V106I + Y188C	12	25 => 20	60	10	70	10
V106M + Y181C + G190A	12	60 => 80	135	50	180	70
V106M + Y188H	12	40 => 60	90	0	120	0
V108I + H221Y	12	20 => 30	20	10	30	15
V108I + Y181C + H221Y + N348I	12	40 => 60	50	40	105	60 => 70
Y181C + G190S + H221Y	12	60 => 85	100	60	135	85 => 95
A98G + V108I + Y181C + G190A	11	70 => 75	105	65	170	90
K101E + V108I + Y181C	11	45 => 50	60	50	110	90
K101P + K103N + V106I	11	25 => 20	120	70	130	70
K103N + H221Y + M230L + L234I	11	100 => 105	115	40	135	75

pattern	count	DOR	EFV	ETR	NVP	RPV
K103N + V106I + M230L	11	75 => 70	105	40	130	70
K103N + V108I + H221Y + K238T	11	20 => 30	110	10	120	15
K103N + V108I + V179E	11	10 => 15	80	10	85	10
V106M + V179D + G190A	11	30 => 50	115	20	130	25
V108I + V179E + Y181C	11	30 => 35	50	40	85	55
Y181C + G190A + N348I	11	30	75	50	135	70
Y181C + H221Y + N348I	11	20 => 35	40	40	90	60 => 70
A98G + K103N + V108I + H221Y	10	35 => 45	95	20	120	30
A98G + L100I + K103N + V108I	10	55 => 60	145	40	165	75
G190A + F227L	10	30 => 50	60	10	90	15
K103N + Y181C + H221Y + K238T	10	30 => 45	130	40	165	60 => 70
K103R + V106M + V179D + F227L	10	60 => 100	105	10	120	25
V106I + G190S	10	45 => 50	60	20	70	25
V179D + G190Q	10	60 => 30	70	55	70	55
V179E + Y181C + G190A	10	30	85	60	130	80
A98G + K101E + Y181C + G190S	9	90 => 100	130	90	190	135
A98G + K103N + V108I + K238T	9	25 => 30	115	10	135	15
K101E + V106I + Y181C + G190A	9	65 => 70	95	85	165	125 => 135
K103N + F227L	9	30 => 50	75	0	90	0
K103N + V106I + Y181C	9	35 => 40	90	40	130	55 => 65
K103N + V106M + G190A	9	30 => 50	165	10	180	15
K103N + V108I + Y181C + K238T	9	40 => 45	130	30	165	45
K103N + Y181C + G190A + N348I	9	40	135	50	195	70
K103N + Y181C + G190S	9	60 => 70	150	50	180	70
L100I + K103N + V108I + H221Y	9	50 => 60	140	40	150	75
L100I + K103N + Y181C + G190A	9	70	195	80	240	130
V108I + E138A	9	10 => 15	10	10	15	15
V179D + Y181C + G190A	9	30	85	60	130	80
V179D + Y181C + H221Y	9	20 => 35	50	50	85	70 => 80
Y181C + G190A + K238T	9	30	105	50	150	70

pattern	count	DOR	EFV	ETR	NVP	RPV
A98G + K101E + Y181C + G190A + H221Y	8	80 => 95	125	100	205	150 => 160
A98G + K103N + V108I + Y181C + G190A	8	80 => 85	165	65	230	90
A98G + V106I + Y181C + G190A	8	65 => 70	95	75	165	100 => 110
G190E + H221Y	8	70 => 75	70	55	75	75
G190Q + H221Y	8	70 => 45	70	55	75	60
K101E + V106I + Y188L	8	90 => 85	75	40	100	115
K101P + V106I	8	25 => 20	60	70	70	70
K103N + H221Y + P225H	8	40 => 45	115	10	120	15
K103N + V108I + Y181C + N348I	8	40 => 45	100	30	150	45
K103N + Y181C + G190A + K238T	8	40	165	50	210	70
L100I + K103N + V106M	8	60 => 80	180	30	180	60
V106I + E138G	8	15 => 10	10	20	20	25
V106I + V108I + Y181C + H221Y	8	55 => 80	50	50	100	70 => 90
V106I + Y188L + H221Y	8	85	70	30	85	85
V106I + Y188L + N348I	8	75 => 70	60	20	85	70
V106M + Y181C + F227L	8	70 => 110	105	30	150	45
A98G + K103N + V108I + F227L	7	55 => 80	100	10	135	15
A98G + K103N + Y181C + G190A + H221Y	7	70 => 85	165	75	230	105 => 115
A98G + K103N + Y181C + H221Y	7	50 => 65	120	55	170	80 => 90
A98G + V108I + Y181C + G190A + H221Y	7	80 => 100	115	75	185	105 => 115
K101E + V106M + Y181C	7	55 => 75	110	50	155	90
K103N + H221Y + K238T	7	10 => 15	100	10	105	15
K103N + V106I + V108I	7	25	70	10	85	10
K103N + V108I + G190A + H221Y	7	20 => 30	125	20	150	30
K103N + V108I + H221Y + M230L + L234I	7	125 => 135	125	40	150	75
K103N + V108I + H221Y + N348I	7	20 => 30	80	10	105	15
K103N + V108I + L234I	7	55 => 60	70	0	75	0
K103N + V108I + Y318F	7	40 => 45	80	0	105	0
K103R + V106M + E138A + V179D	7	30 => 50	90	20	90	40

pattern	count	DOR	EFV	ETR	NVP	RPV
K103R + V179D + Y181C + G190A	7	30	105	60	150	95
K103S + V106M + F227L	7	60 => 100	120	0	150	0
K103S + V108I + G190A	7	10 => 15	100	10	135	15
V106I + H221Y	7	25	10	20	25	25
V108I + F227L	7	40 => 65	25	0	45	0
V108I + Y181C + F227L	7	60 => 85	55	30	105	45
V108I + Y181C + N348I	7	30 => 35	40	30	90	45
A98G + K101H + Y181C + G190A	6	50	105	75	170	100
A98G + K103N + V108I + P225H	6	55 => 60	130	10	150	15
A98G + Y181C + G190S	6	70 => 80	110	65	155	90
F227I	6	30 => 50	10	0	30	0
G190S + H221Y	6	40 => 45	70	20	75	30
K101E + V108I + Y181C + G190S + H221Y	6	100 => 130	130	85	185	130 => 140
K101E + V108I + Y181C + H221Y	6	55 => 75	70	60	125	105 => 115
K101E + Y181C + G190A + N348I	6	50	95	75	170	115
K101H + V108I + Y181C	6	30 => 35	50	40	90	55
K103N + E138K	6	0 => 10	70	10	70	45
K103N + V106I + Y181C + G190A	6	55 => 60	135	60	190	80 => 90
K103N + V108I + F227L	6	40 => 65	85	0	105	0
K103N + V108I + H221Y + F227L	6	50 => 80	95	10	120	15

55 patterns were affected. Due to 7 changed rules listed below:

- Added new rule **N155H + S147G**, with scores 10 (BIC), 10 (DTG), 10 (EVG), 0 (RAL).
- Added new rule **N155H + R263K**, with scores 20 (BIC), 20 (DTG), 0 (EVG), 0 (RAL).
- Added new rule **S147G + Q148HKR**, with scores 15 (BIC), 15 (DTG), 0 (EVG), 0 (RAL).
- Changed scores of rule **R263K**: 25 to 30 (BIC).
- Changed scores of rule **Q148HKR + N155H**: 10 to 20 (BIC), 10 to 20 (DTG).
- Changed scores of rule **L74FIM + Q148HKR**: 10 to 15 (BIC).
- Changed scores of rule **E92Q + N155H**: 5 to 10 (BIC), 5 to 10 (DTG), 0 to 10 (EVG), 0 to 10 (RAL).

pattern	count	BIC	DTG	EVG	RAL
R263K	15	25 => 30	30	30	25
E92Q + N155H	14	25 => 30	25 => 30	120 => 130	90 => 100
L74I + G140S + Q148H	7	55 => 60	60	105	105
E138K + S147G + Q148R	6	45 => 60	45 => 60	135	75
L74M + G140S + Q148H	5	55 => 60	60	105	105
G140S + Q148H + N155H	3	65 => 75	65 => 75	150	150
L74I + G140S + Q148R	3	55 => 60	60	105	105
Q148R + N155H	3	45 => 55	45 => 55	120	120
T97A + E138K + S147G + N155H + E157Q	3	20 => 30	20 => 30	155 => 165	95
D232N + R263K	2	25 => 30	30	40	35
E138K + G140A + Q148R + N155H	2	95 => 105	95 => 105	180	180
E92Q + G140S + Q148K + N155H	2	85 => 100	85 => 100	210 => 220	180 => 190
E92Q + G140S + Q148R + N155H	2	80 => 95	80 => 95	210 => 220	180 => 190
E92Q + N155H + D232N	2	25 => 30	25 => 30	130 => 140	100 => 110
E92Q + N155H + E157Q	2	25 => 30	25 => 30	130 => 140	100 => 110
H51Y + E92Q + G140S + Q148K + N155H	2	95 => 110	95 => 110	225 => 235	195 => 205
Q95K + E138K + S147G + Q148R	2	45 => 60	45 => 60	145	85
E138A + S147G + Q148R + N155H	1	65 => 100	65 => 100	195 => 205	135
E138K + G140A + Q148K + N155H	1	100 => 110	100 => 110	180	180
E138K + G140S + S147G + Q148R	1	75 => 90	75 => 90	180	120
E138K + Q148R + N155H + G163K + D232N	1	70 => 80	70 => 80	160	160
E138K + S147G + Q148R + G163R	1	50 => 65	50 => 65	150	90
E157Q + R263K	1	35 => 40	40	40	35

pattern	count	BIC	DTG	EVG	RAL
E92Q + E138K + N155H + D232N	1	35 => 40	35 => 40	145 => 155	115 => 125
E92Q + E138K + Y143C + N155H + S230R	1	55 => 60	65 => 70	170 => 180	185 => 195
E92Q + N155H + G163R + D232N	1	25 => 30	25 => 30	145 => 155	115 => 125
E92Q + Q95K + N155H	1	25 => 30	25 => 30	130 => 140	100 => 110
E92Q + T97A + N155H + D232N	1	25 => 30	25 => 30	140 => 150	110 => 120
E92Q + T97A + Y143H + N155H	1	30 => 35	30 => 35	145 => 155	160 => 170
G140S + Q148H + N155H + E157Q	1	65 => 75	65 => 75	160	160
G140S + Q148K + N155H + D232N	1	70 => 80	70 => 80	160	160
G140S + Q148K + N155H + G163R	1	75 => 85	75 => 85	165	165
G140S + Q148R + N155H + E157Q	1	65 => 75	65 => 75	160	160
H51Y + E92Q + G140S + Q148K + N155H + G163R	1	100 => 115	100 => 115	240 => 250	210 => 220
L74I + E138K + Q148R	1	55 => 60	60	90	90
L74I + E138K + S147G + Q148R	1	55 => 75	60 => 75	150	90
L74I + E138K + S147G + Q148R + G163R	1	60 => 80	65 => 80	165	105
L74I + E138T + G140S + Q148H	1	85 => 90	90	135	135
L74I + G140S + Q148R + E157Q	1	55 => 60	60	115	115
L74I + G140S + Q148R + G163R	1	60 => 65	65	120	120
L74I + G140S + Q148R + R263K	1	80 => 90	90	135	130
L74I + Q148R	1	35 => 40	40	75	75
L74M + E138K + G140C + Q148R + E157Q	1	85 => 90	90	145	145
L74M + E138T + G140S + Q148H	1	85 => 90	90	135	135
L74M + E92Q + Q148R	1	45 => 50	50	135	105
L74M + G140A + Q148R	1	55 => 60	60	105	105
L74M + G140C + Q148R	1	55 => 60	60	105	105

pattern	count	BIC	DTG	EVG	RAL
L74M + G140C + Q148R + G163R	1	60 => 65	65	120	120
L74M + G140S + Q148R	1	55 => 60	60	105	105
L74M + G140S + Q148R + E157Q	1	55 => 60	60	115	115
N155H + D232N + R263K	1	35 => 60	40 => 60	100	95
S147G + Q148R	1	25 => 40	25 => 40	120	60
T66K + L74M + G140S + Q148R + E157Q	1	70 => 75	75	175	175
T97A + E138K + Q148R + N155H + G163K	1	85 => 95	85 => 95	160	160
T97A + G140S + Q148R + N155H + G163R	1	85 => 95	85 => 95	175	175