

Table S2. Compositions of S2 and S3 substrate-binding cavities of HIV-1 and SASP14 proteases. Binding site-forming residues of HIV-1 and SASP14 proteases are shown. Bold letters indicate residues where side chain-side chain interaction may occur. Residues were classified as follows. Hydrophobic: A, V, I, L, F, W, C, M, P, G; hydrophilic: S, T, N, Q, Y, H; and charged: D, E, K, R. * Binding site-forming residues of HIV-1 PR have been identified previously [24, 25].

S2 site			S3 site	
HIV-1*	SASP14		HIV-1*	SASP14
A28	A25		L10	Y7
D30	V27		R8	G5
V32	V29		D29	Q26
I47	V53		G48	K54
G48	K54		V82	E90
G49	V55			
I50	A56			
L76	L83			
I84	I93			
86	100	hydrophobic (%)	60	20
0	0	hydrophylic (%)	0	40
14	0	charged (%)	40	40