

Table 3. Active-site residues in paramyxovirus HNs, influenza virus NA, and MV-H

Residue	NDV	hPIV3	SV5	Flu	MV
R1	175	192	163	118	S218
R4	416	424	405	292	P457
R5	498	502	495	371	E535
Y6	526	530	523	406	L566
E4	401	409	390	277	G440
E6	547	549	544	425	C583
D1	198	216	187	151	S247

NA/sialidases have strongly conserved active-site residues. Paramyxovirus HNs (NDV, SV5, hPIV3) and influenza virus NA (Flu) have those residues, but H proteins, of all morbilliviruses, do not. Corresponding amino acids in MV-H are shown. Numbering is based on the six-blade β -propeller sheet structure in NDV, hPIV3, and SV5. For Flu, N2 subtype numbering is used.