

Supplementary Table S2. Solvent accessibility calculations for salt bridge residues.[†]**Table S2a.** Total solvent exposed surface area for a single salt bridge at position 286 and 390 for caspase-1 variants (units in Å²).

Construct	Total	Polar	Hydrophobic
Wild type	17.2	12.8	4.4
R286K	18.9	4.8	14.1
E390E	18.1	11.6	6.5
R286K/E390D	17.3	7.7	9.6

Table S2a. Solvent exposed surface area for individual atoms for side chain residues at position 286 and 390 for caspase-1 variants (units in Å², only atoms with accessible surface area are shown).

Wild type	R286K	E390D	R286K/E390D
Arg286	Lys286	Arg286	Lys286
C γ – 2.7	C γ – 2.2	C γ – 2.9	C γ – 2.6
C δ – 0.0	C δ – 0.0	C δ – 0.2	C δ – 1.3
N ϵ – 2.7	C ϵ – 7.6	N ϵ – 2.7	C ϵ – 0.4
N η 2 – 7.3	N ζ – 0.2	N η 2 – 8.9	N ζ – 5.6
Glu390	Glu390	Asp390	Asp390
C β – 0.7	C β – 0.8	C β – 2.4	C β – 4.1
C γ – 0.0	C γ – 0.3	C γ – 1.0	C γ – 1.2
C δ – 1.0	C δ – 3.4		
O ϵ 2 – 2.8	O ϵ 2 – 4.6	O δ 2 – 0.0	O δ 2 – 2.1

[†]These calculations were done using the WHATIF Web Interface based on the following structures: wild type – 2HBQ, R286K – 2H4Y, E390D – 2H4W, R286K/E390D – 2H51.