

Table 2: Combination of fragments 1 and 2 with experimental free energy of binding ΔG to generate factor Xa inhibitors 1a and 2a.^[a]

Fragment 1	Fragment 2	$\Delta G_{\text{frag}1}$	$\Delta G_{\text{frag}2}$	Final ligand	ΔG_{final}	$\Delta G_{\text{link}}^{[b]}$	Structural change
		1d -24.2	-11.4		1a -49.6	-14.0	add single bond
		1c -24.2	-11.4		1a -49.6	-14.0	remove methyl
		1b -24.2	-14.4		1a -49.6	-11.0	remove amide group
		1e -24.0	-11.4		1a -49.6	-14.2	remove N-methyl
		1c -24.0	-11.4		1a -49.6	-14.2	remove ethylsulfonamide
		2c -20.0	-11.4		2a -48.6	-17.2	add indole
		2h -20.0	-20.3		2a -48.6	-8.3	remove methyl
		2b -20.0	-34.9		2a -48.6	6.3	remove N-methylacetyl
		2e -25.8	-11.4		2a -48.6	-11.4	remove N-methyl
		2c -25.8	-11.4		2a -48.6	-11.4	remove propionamide
		2d -25.8	-11.4		2a -48.6	-11.4	remove acetamide
		2c -15.4	-11.4		2a -48.6	-21.8	remove 3 methyl groups
		2d -15.4	-11.4		2a -48.6	-21.8	remove 2 methyl groups
		2e -15.4	-11.4		2a -48.6	-21.8	add carbonyl

[a] Combination of fragments 1 and 2 results in a final ligand after minor structural changes as indicated. ΔG values are given in kJ mol^{-1} , they are calculated at 298 K. [b] The linker contributions are calculated using: $\Delta G_{\text{link}} = \Delta G_{\text{final}} - \Delta G_{\text{frag1}} - \Delta G_{\text{frag2}}$.