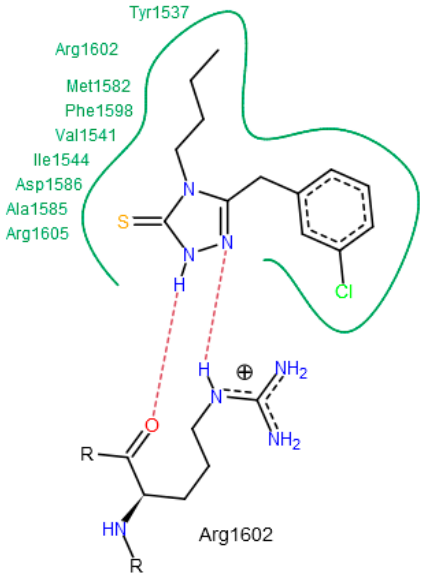
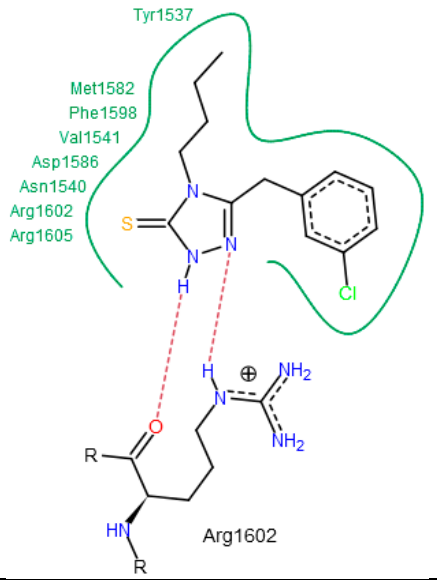
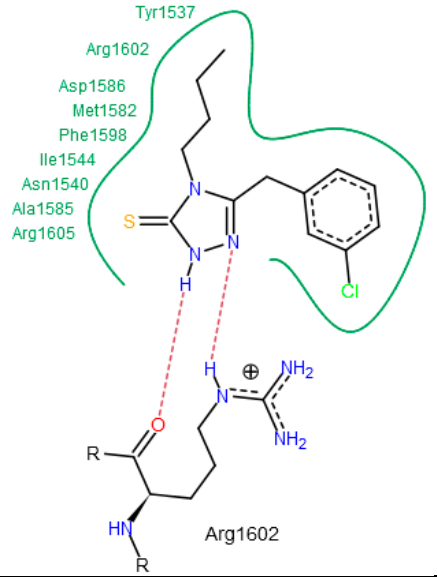
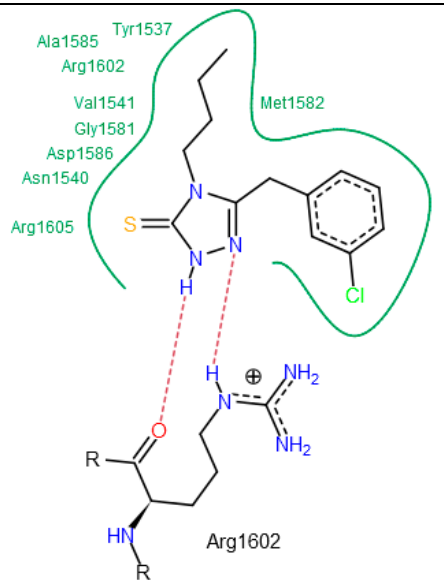
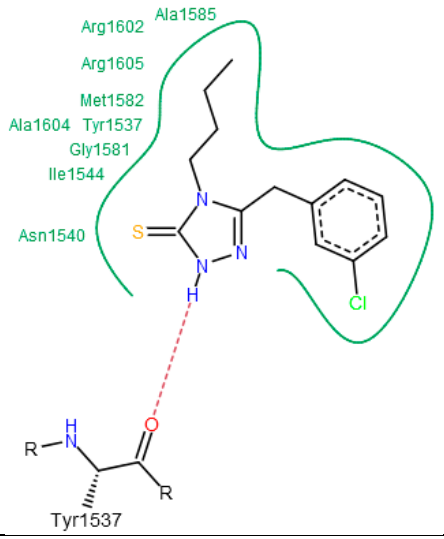
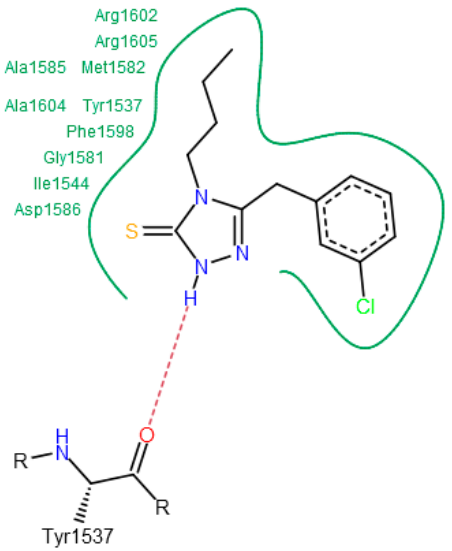
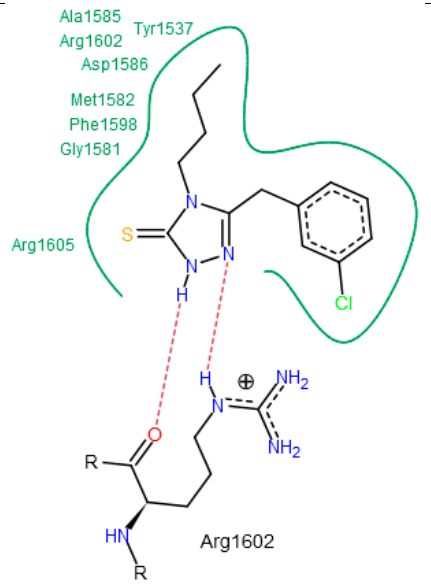
SUPPORTING INFORMATION

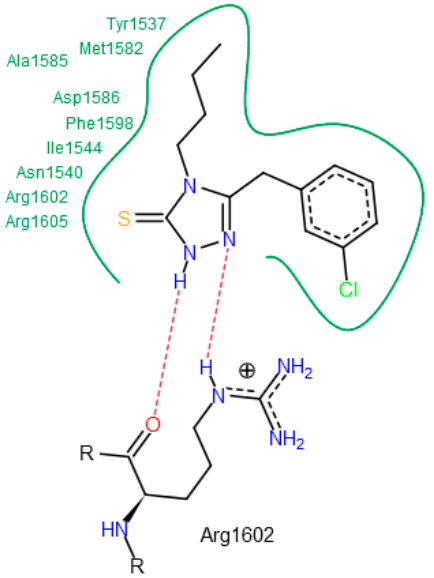
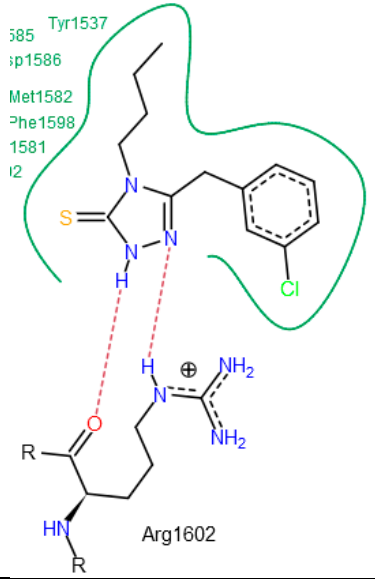
Table S1. Docking results of the *s*-triazoles **1-4** in human Nav1.7-VSD4-NavAb protein (pdb id 5EK0)

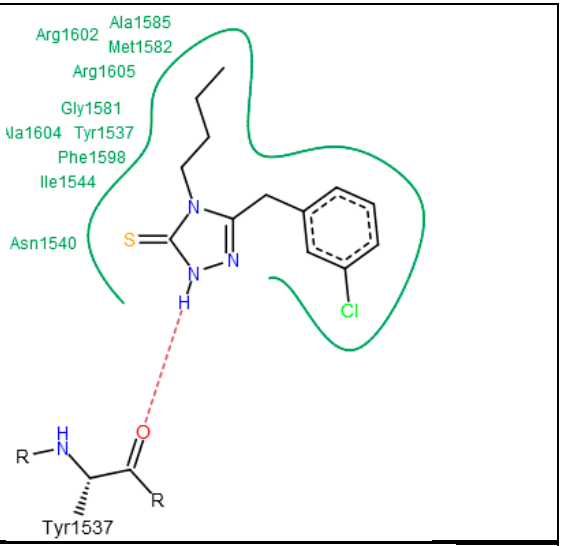
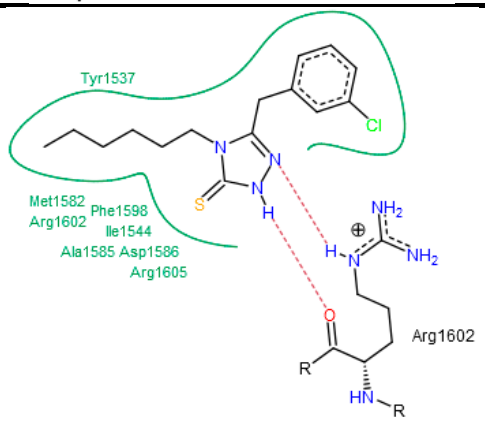
***s*-triazole**	**Posename #**	**docking score**	**Hyde (ΔG) in kJ/mol**	**PoseView**
1	**1**	-13.4	-37	

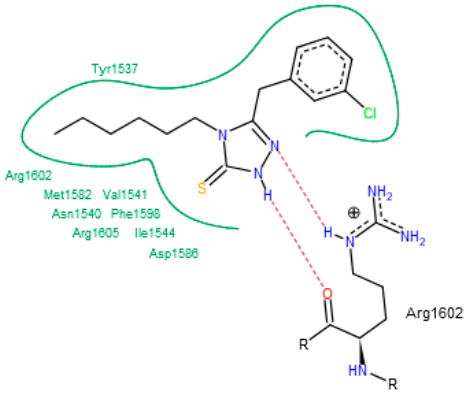
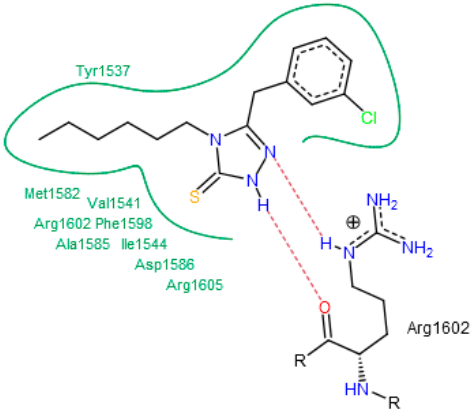
	2	-13.0	-36	
	3	-12.7	-37	

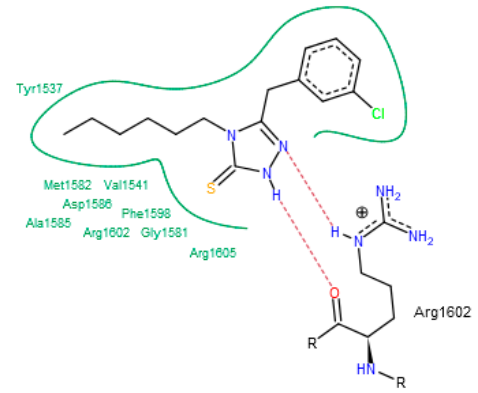
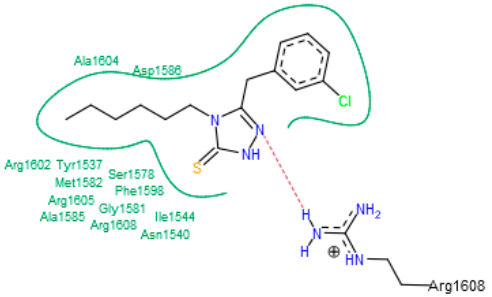
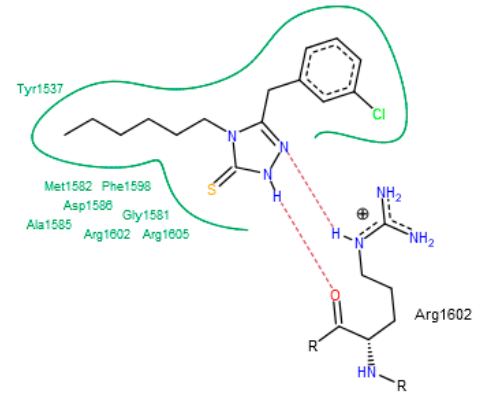
	4	-12.4	-25	
	5	-12.0	-28	

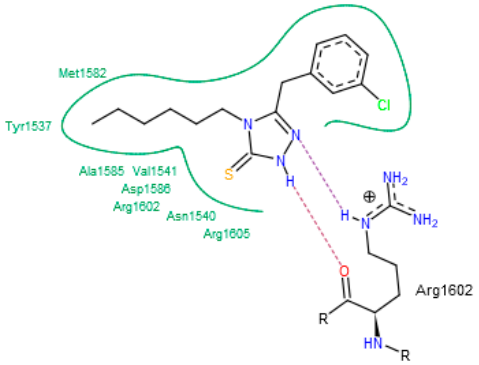
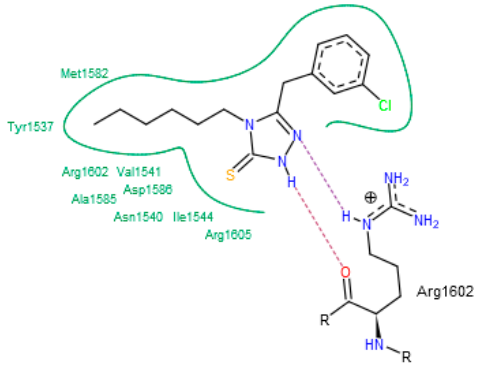
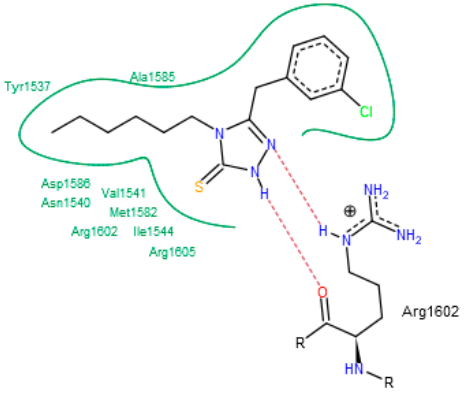
	6	-12.0	-28	
	7	-11.8	-23	

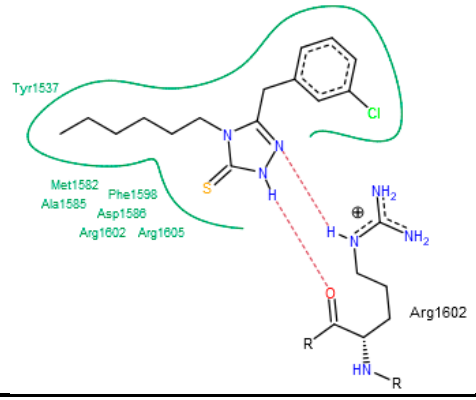
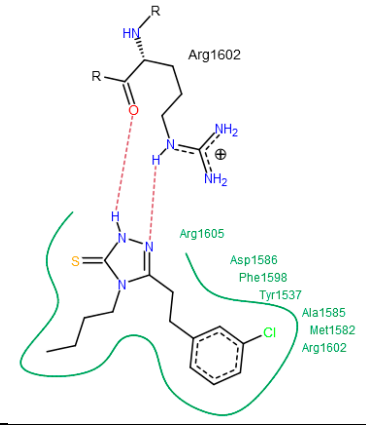
	8	-11.8	-10	
	9	-11.8	-28	

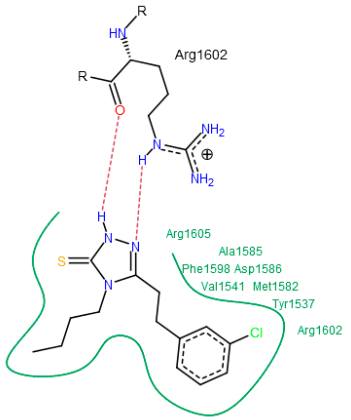
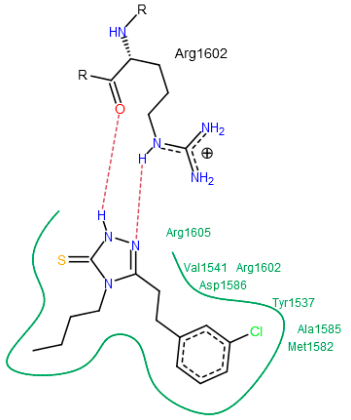
	10	-11.7	-31	
2	**1**	-12.1	-40	

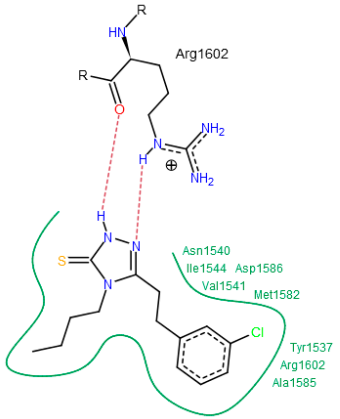
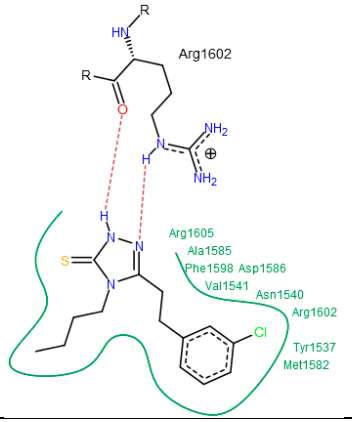
	2	-12.0	-6	
	3	-11.3	-41	

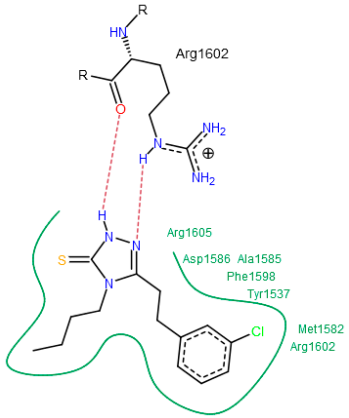
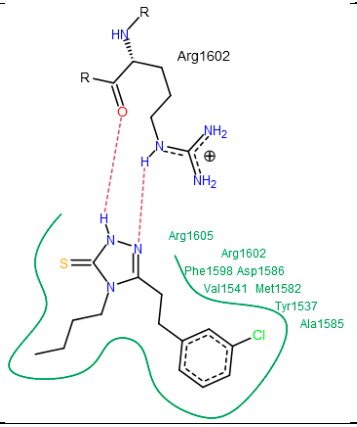
	4	-11.0	-14	
	5	-11.0	-26	
	6	-10.9	-8	

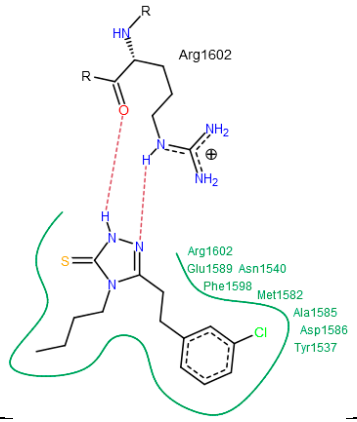
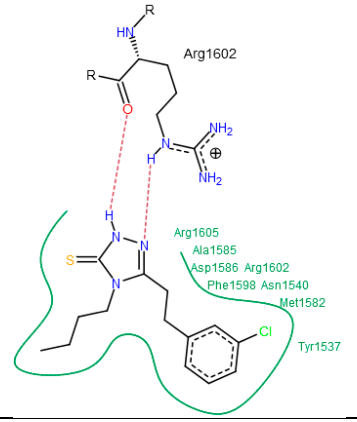
	7	-10.8	-17	
	8	-10.7	-32	
	9	-10.6	-8	

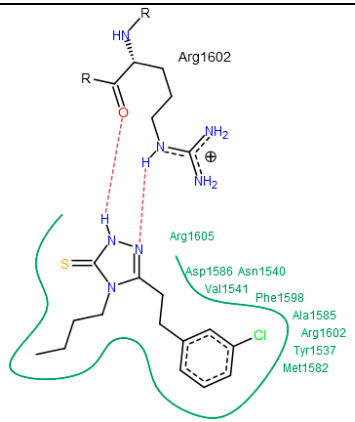
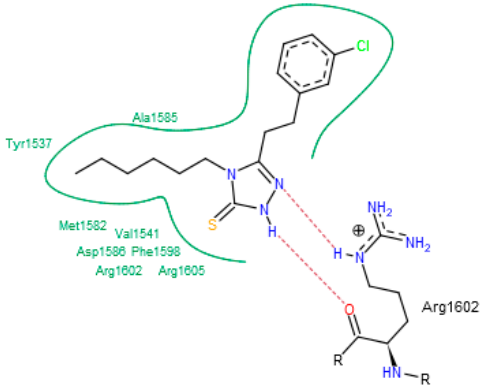
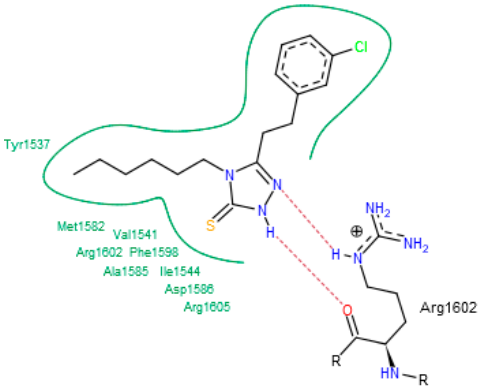
	10	-10.4	-29	
3	**1**	-13.2	-13	

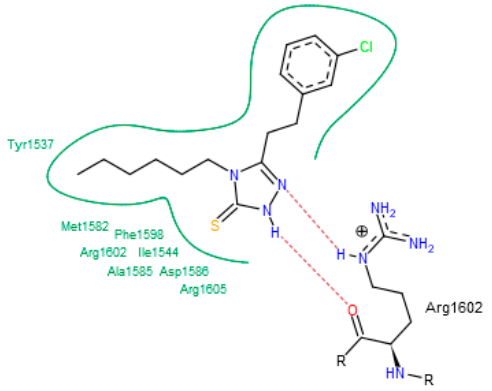
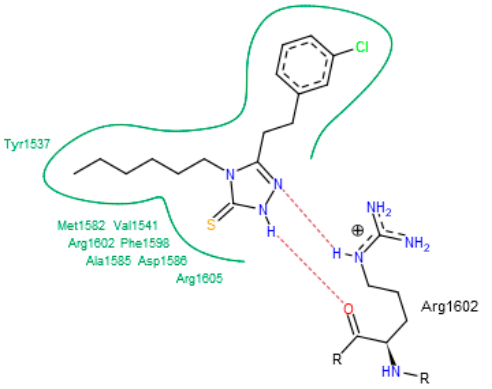
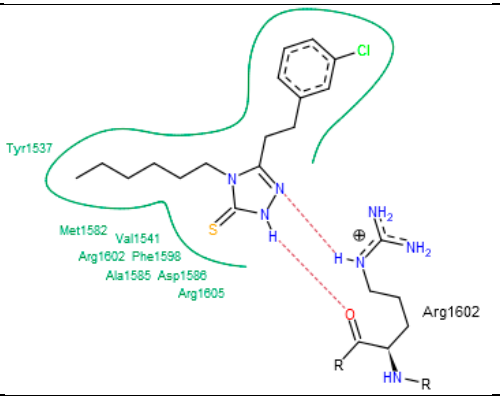
	2	-12.4	-21	
	3	-11.4	-11.0	

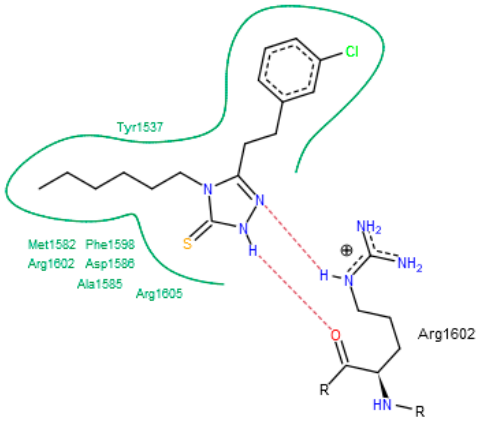
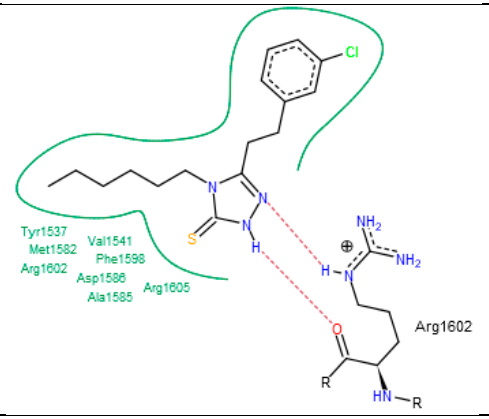
	4	-11.0	-34	
	5	-10.8	-24	

	6	-10.7	-36	
	7	-10.7	-34	

	8	-10.6	-34	
	9	-10.6	-17	

	10	-10.2	-27	
4	**1**	-11.6	-25	
	2	-11.6	-22	

	3	-11.5	-39	
	4	-11.4	-30	
	5	-11.3	-14	

	6	-10.9	-16	
	7	-10.6	-31	

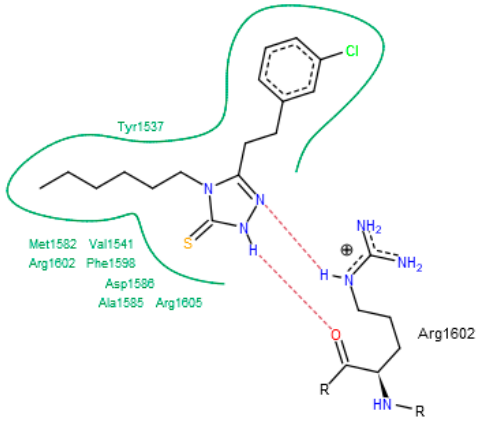
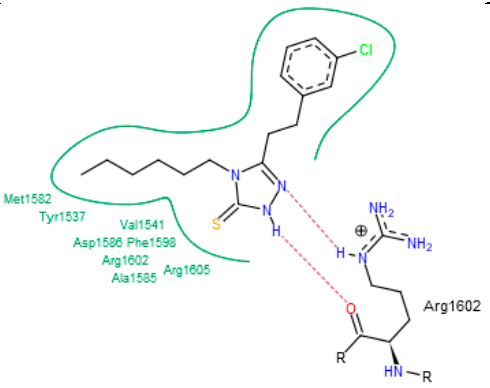
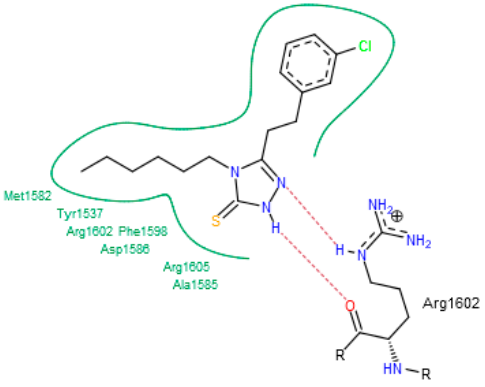
	8	-10.5	-14	
	9	-10.5	-12	
	10	-10.3	-10	

Table S2. Statistical evaluation of differences between means of IC_{50} values reflecting VGSC affinity.

Tukey's multiple comparisons test	Mean diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P value
1 vs. 2	9.63	9.152 to 10.11	Yes	****	<0.0001
1 vs. 3	3.9	3.422 to 4.378	Yes	****	<0.0001
1 vs. 4	-3.1	-3.578 to -2.622	Yes	****	<0.0001
1 vs. veratridine	-2	-2.478 to -1.522	Yes	****	<0.0001
2 vs. 3	-5.73	-6.208 to -5.252	Yes	****	<0.0001
2 vs. 4	-12.73	-13.21 to -12.25	Yes	****	<0.0001
2 vs. veratridine	-11.63	-12.11 to -11.15	Yes	****	<0.0001
3 vs. 4	-7	-7.478 to -6.522	Yes	****	<0.0001
3 vs. veratridine	-5.9	-6.378 to -5.422	Yes	****	<0.0001
4 vs. veratridine	1.1	0.622 to 1.578	Yes	****	<0.0001

Table S3. Statistical evaluation of differences between means of ED_{50} values of compounds **3**, **4** and valproate measured at the peak of their anticonvulsant activity.

Tukey's multiple comparisons test	Mean diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P value
ED_{50} of 3 vs ED_{50} of valproate	-92.4	-102 to -82.82	Yes	****	<0.0001
ED_{50} of 4 vs ED_{50} of valproate	-73.6	-83.18 to -64.02	Yes	****	<0.0001
ED_{50} of 3 vs ED_{50} of 4	-18.8	-28.38 to -9.218	Yes	****	<0.0001

Table S4. Statistical analysis of differences between ED_{50} values showing anticonvulsant activity of compounds containing metylene linker (**1**, **2**) and ethylene linker (**3**, **4**)

Tukey's multiple comparisons test	Mean diff.	95.00% CI of diff.	Significant?	Summary	Adjusted P value
ED_{50} of 1 vs ED_{50} of 3 (*butyl derivatives*)	-53.4	-61.25 to -45.55	Yes	****	<0.0001
ED_{50} of 2 vs ED_{50} of 4 (*hexyl derivatives*)	-43.3	-51.15 to -35.45	Yes	****	<0.0001