

Table S4 The enzyme inhibitory of new isolated isoquinoline alkaloids

Compounds	Enzymes	Results (IC ₅₀)	Positive drug (IC ₅₀)	Ref.
Puniceusine C (19)	Protein tyrosine phosphatase CD45	8.4 μM	2-[(4-Acetylphenyl)amino]-3-chloronaphthoquinone, 0.29 μM	34
Puniceusine D (20)	Protein tyrosine phosphatase CD45	5.6 μM	2-[(4-Acetylphenyl)amino]-3-chloronaphthoquinone, 0.29 μM	34
Yanhusanine B (39)	Human carboxylesterase (hCE2)	(+)- 39 , 2.0 μM	Loperamide, 4.6 μM	
Yanhusanine D (41)	hCE2	(+)- 41 , 8.7 μM (+)- 41 , 7.1 μM	Loperamide, 4.6 μM	44
Yanhusanine E (42)	hCE2	(+)- 42 , 5.0 μM (+)- 42 , 9.3 μM	Loperamide, 4.6 μM	
Yanhusanine F (43)	hCE2	(+)- 43 , 4.6 μM (+)- 43 , 13.2 μM	Loperamide, 4.6 μM	

(S)-1,2,3,4-Tetrahydro-7-methoxy-8-hydroxy-2-methyl-13-methoxybenzylisoquinoline (79)	AChE	25.6 μ M	Galanthamine	56
	BuChE	33.0 μ M	1.2 μ M	
			15.6 μ M	
Mucroniferanine H (124)	AChE	2.31 μ M	Galanthamine 1.34 μ M	45
	BuChE	36.71 μ M	6.81 μ M	