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(54) Title: PYRIDINONE ANTAGONISTS OF ALPHA-4 INTEGRINS

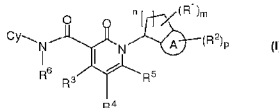


Figure 1

Compound	Compound Name	A IC ₅₀ (nM)	B IC ₅₀ (nM)
1	(R)-1-(2,3-dihydro-1H-inden-1-yl)-2-oxo-N-(pyridin-4-yl)-1,2-dihydropyridine-3-carboxamide	(++)	(++)
2	1-(2,3-Dihydro-1H-inden-1-yl)-2-oxo-N-(pyridin-4-yl)-1,2-dihydropyridine-3-carboxamide	(++)	(++)
3	N-(4-Chlorophenyl)-1-(2,3-dihydro-1H-inden-1-yl)-2-oxo-1,2-dihydropyridine-3-carboxamide	(+)	
4	(S)-1-(2,3-Dihydro-1H-inden-1-yl)-2-oxo-N-(pyridin-4-yl)-1,2-dihydropyridine-3-carboxamide	(+)	
5	(S)-N-(4-Chlorophenyl)-1-(2,3-dihydro-1H-inden-1-yl)-2-oxo-1,2-dihydropyridine-3-carboxamide	(+)	
6	(R)-N-(4-Chlorophenyl)-1-(2,3-dihydro-1H-inden-1-yl)-2-oxo-1,2-dihydropyridine-3-carboxamide	(++)	
7	N-(4-Chlorophenyl)-1-((1S,2R)-2-hydroxy-2,3-dihydro-1H-inden-1-yl)-2-oxo-1,2-dihydropyridine-3-carboxamide	(+)	
8	1-((1S,2R)-2-Hydroxy-2,3-dihydro-1H-inden-1-yl)-2-oxo-N-(pyridin-4-yl)-1,2-dihydropyridine-3-carboxamide	(+)	
9	N-(4-Chlorophenyl)-1-((1R,2S)-2-hydroxy-2,3-dihydro-1H-inden-1-yl)-2-oxo-1,2-dihydropyridine-3-carboxamide	(+)	
10	1-((1R,2S)-2-Hydroxy-2,3-dihydro-1H-inden-1-yl)-2-oxo-N-(pyridin-4-yl)-1,2-dihydropyridine-3-carboxamide	(+)	
11	N-(4-chlorophenyl)-1-(4-methoxy-2,3-dihydro-1H-inden-1-yl)-2-oxo-1,2-dihydropyridine-3-carboxamide	(++)	(+++)
12	1-(6-Methoxy-2,3-dihydro-1H-inden-1-yl)-2-oxo-N-(pyridin-4-yl)-1,2-dihydropyridine-3-carboxamide	(+)	
13	N-(4-chlorophenyl)-1-(6-methoxy-2,3-dihydro-1H-inden-1-yl)-2-oxo-1,2-dihydropyridine-3-carboxamide	(+)	
14	N-(4-chlorophenyl)-1-(5-methoxy-2,3-dihydro-1H-inden-1-yl)-2-oxo-1,2-dihydropyridine-3-carboxamide	(++)	
15	1-(6-methoxy-2,3-dihydro-1H-inden-1-yl)-2-oxo-N-(pyridin-4-yl)-1,2-dihydropyridine-3-carboxamide	(++)	

(57) Abstract: The present invention provides compounds that are alpha4 integrin antagonists having a structure according to the following formula (I) or a tautomer, mixture of tautomers, salt or solvate thereof, wherein Cy, ring A, m, n, p, R¹, R², R³, R⁴, R⁵ and R⁶ are defined in the specification. The invention further provides pharmaceutical compositions including the compounds of the invention as well as methods of making and using the compounds and compositions of the invention, e.g., in the treatment and prevention of various conditions and disorders, such as Crohn's disease and ulcerative colitis.



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