Coumarins and other fused bicyclic heterocycles with selective tumor-associated carbonic anhydrase isoforms inhibitory activity

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Abstract

Herein we report for the first time a series of 2-benzamido-N-(2-oxo-4-(methylitrifluoromethyl)-2H-chromen-7-yl) benzamide 3a-f and substituted quinazolin-4(3H)-ones and 2H-benzo[e][1,2,4]thiadiazin-3(4H)-one 1,1-dioxides (5, 6, 8 and 10a-c) as selective inhibitors of the tumor associated hCA IX and XII isoforms. Among the compounds reported the trifluoromethyl derivative 3d resulted the most potent against these CA isoforms with K(I)s of 10.9 and 6.7 nM. (C) 2016 Elsevier Ltd. All rights reserved.

Keywords

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