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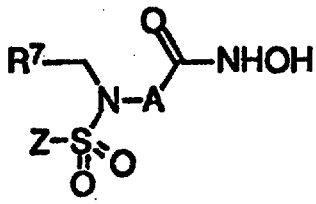
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(54) Title: THE PREPARATION AND USE OF ORTHO–SULFONAMIDO HETEROARYL HYDROXAMIC ACIDS AS MATRIX METALLOPROTEINASE AND TACE INHIBITORS

(57) Abstract

The present invention relates to the discovery of novel, low molecular weight, non–peptide inhibitors of matrix metalloproteinases (e.g. gelatinases, stromelysins and collagenases) and TNF–α converting enzyme (TACE, tumor necrosis factor–α converting enzyme) which are useful for the treatment of diseases in which these enzymes are implicated such as arthritis, tumor growth and metastasis, angiogenesis, tissue ulceration, abnormal wound healing, periodontal disease, bone disease, proteinuria, aneurysmal aortic disease, degenerative cartilage loss following traumatic joint injury, demyelinating diseases of the nervous system, graft rejection, cachexia, anorexia, inflammation, fever, insulin resistance, septic shock, congestive heart failure, inflammatory disease of the central nervous system, inflammatory bowel diseases, HIV infection, age related macular degeneration, diabetic retinopathy, proliferative vitreoretinopathy, retinopathy of prematurity, ocular inflammation, keratoconus, Sjogren's syndrome, myopia, ocular tumors, ocular angiogenesis/neovascularization. The TACE and MMP inhibiting ortho–sulfonamido aryl hydroxamic acids of the present invention are represented by formula (1) where the hydroxamic acid moiety and the sulfonamido moiety are bonded to adjacent carbons on group A where A is defined as: a 5–6 membered heteroaryl having from 1 to 3 heteroatoms independently selected from N, O, and S and optionally substituted by R^1, R^2 and R^3; and Z, R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8 and R^9 are described in the specification, and the pharmaceutically acceptable salts thereof and the optical isomers and diastereomers thereof.



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