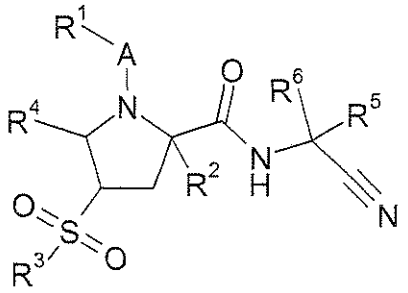
Cathepsin L shows a broader expression profile than cathepsin S and there are also data which suggest a role of cathepsin L in atherosclerosis, e.g. LDLrec & Cat L deficient mice show a reduced atherosclerotic phenotype (Kitamoto et al. 2007). In addition, Cat L was suggested to be involved in metabolic syndrome as it controls adipogenesis and peripheral glucose tolerance. In renal disease Cathepsin L is described to regulate podocyte function by proteolytically processing dynamin and thereby proteinuria (Sever et al. 2007).

Tissue remodelling, extracellular matrix degradation, the generation of active neuropeptides and roles in antigen presentation in thymic epithelial cells are cellular activities described for Cathepsin L (Funkelstein et al. 2008; Rudensky and Beers 2006).

In a first aspect, there is provided a compound of formula (I)



(I)

wherein

R^1 is hydrogen, alkyl, haloalkyl, alkoxy, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, alkylcycloalkyl, haloalkylcycloalkyl, phenylcycloalkyl, halocycloalkyl, phenylhaloalkyl, halophenylcycloalkyl, alkoxycarbonylaminocycloalkyl, cyanoalkylcycloalkyl, halophenylalkyl, pyridinylcycloalkyl, aminocycloalkylalkyl, aminocarbonylphenylcycloalkyl, haloalkyloxyphenylcycloalkyl, alkylpyrazolylphenylcycloalkyl, bis(halophenyl)alkyl, phenylcycloalkyl, alkylphenylcycloalkyl, haloalkylphenylcycloalkyl, halophenyldioxolane, naphtylcycloalkyl, halopyridinylcycloalkyl, benzo[1,3]dioxolyl, naphtyldioxolane, halo-1H-indazolyl, halophenylhyrdoxyalkyl, (halophenyl)(alkoxycarbonylamino)alkyl, alkylthiazolylcycloalkyl, halopyrimidinylalkyl, (halophenyl)(amino)alkyl, (halophenyl)(haloalkylamino)alkyl, haloalkylpyrazolylalkyl, (halophenyl)(alkoxycarbonylpiperidinyl), (halophenyl)(morpholinyl)alkyl, halophenylhaloalkyl, alkylphenylcycloalkyl, hydroxyalkylcycloalkyl, (halophenyl)(alkenylamino)alkyl, alkoxyhalophenylcycloalkyl, halonaphtylcycloalkyl, halophenyloxycycloalkyl, phenyltetrahydropyranyl or R^{11};

A is $-CH_2-$, $-CH_2CH_2-$, carbonyl, $-C(O)O-$, $-SO_2-$ or absent;

R^2 is hydrogen, alkyl, haloalkyl, cycloalkyl, phenyl, phenylalkyl or phenylsulfonylalkyl;

or A, R^1 and R^2 together form $-CH_2CH_2-$, $-CH_2CF_2CH_2-$, $-CH_2CH_2CH_2-$, $-CH_2CH_2CH_2CH_2-$; $-CH_2CH_2OCH_2-$ or $-CH_2CH_2CH(CN)-$;

R^3 is alkyl, hydroxyalkyl, cycloalkyl, phenyl phenylalkyl or substituted phenyl, wherein substituted phenyl is phenyl substituted with one to three substituents independently selected from alkyl, haloalkyl, hydroxyalkyl, alkoxy, haloalkyloxy, halogen, pyrazolyl, alkylopyrazolyl, imidazolyl, benzoimidazolyl, 6-oxo-6H-pyridazinyl, alkyl-6-oxo-6H-pyridazinyl, piperazinyl, N-alkylpiperazinyl, piperidinyl, difluoropyrrolidinyl, phenylimidazolyl, oxo-pyrrolidinyl, oxo-oxazolidinyl, morpholinyl, oxo-morpholinyl, oxo-pyridinyl, 2-oxo-2H-pyrazinyl, difluoropiperidinyl, haloalkylpiperidinyl, piperidinylalkoxy, oxetanyloxy, alkylpyrazolyl, halopyridinyl, alkylpyridinyl, cycloalkyl, cycloalkylalkyl, halophenyl, alkylcarbonylaminocycloalkylalkyl, haloalkylpiperazinyl, alkylamino, alkoxyalkylpiperazinyl, cycloalkylpiperazinyl, hexahydropyrrolo[1,2-a]pyrazinyl, 5,6-dihydro-8H-[1,2,4]triazolo[4,3-a] pyrazin-7-yl, alkylimidazolyl, azetidinyl, cycloalkylpiperazinyl, alkylimidazolyl, alkoxyalkoxy, imidazo[4,5-c]pyridinyl, alkylpiperazinyl, hexahydro-pyrrolo[1,2-a]pyrazinyl, haloazetidinyl, pyrimidinyl and alkenyloxy;

R^4 is hydrogen, alkyl, haloalkyl, alkoxy, alkoxyalkyl, cycloalkyl, cycloalkyloxy, phenyl, alkylphenyl, halophenyl, phenyloxy or halophenyloxy;

R^5 and R^6 are independently selected from hydrogen, alkyl, cycloalkyl, alkyloxy, hydroxyalkyl, haloalkyl, haloalkyloxy, phenyl and phenylalkyloxy;

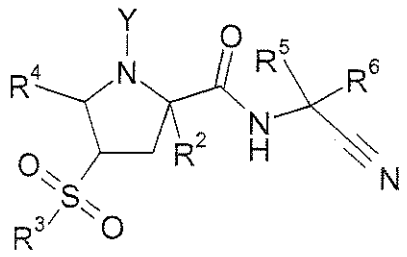
or R^5 and R^6 together with the carbon atom to which they are attached form cycloalkyl, pyrrolidinyl or piperidinyl; and

R^{11} is phenyl, substituted phenyl, tetrahydropyranyl, pyridinyl, alkylpyridinyl, haloalkylpyridinyl, oxetanyl, alkyloxetanyl, pyrrolidinyl, alkylpyrrolidinyl, pyrimidinyl, haloalkylpyrimidinyl, alkylpiperidinyl, naphtyl, biphenyl, haloalkyl-[1,3,4]thiadiazolyl, alkoxycarbonylpiperidinyl, halo-[1,2,4]thiadiazolyl, pyrazolyl or substituted pyrazolyl, wherein substituted phenyl and substituted pyrazolyl are phenyl and pyrazolyl each substituted with one to three substituents independently selected from alkyl, halogen, haloalkyl, alkoxy, alkoxycarbonyl, halophenyl, halopyridinyl, oxodihydropyridinyl, nitro, thiazolyl, haloalkylphenyl, alkylphenyl, phenyl, alkylpyridinyl, tetrahydropyranyl, pyridazinyl, cycloalkyl, phenylalkyl, oxazolyl, alkoxyphenyl, quinolinyl, alkylcarbonylaminophenyl, haloalkoxy, alkylsulfonyl, phenylalkoxycarbonylpiperidinyl, piperidinyl, thiopyranyl, dioxothiopyranyl, morpholinylalkyl and alkylimidazolyl;

or a pharmaceutically acceptable salt thereof.

In a second aspect, there is provided a process for the preparation of a compound of formula (I) as defined above comprising one of the following steps:

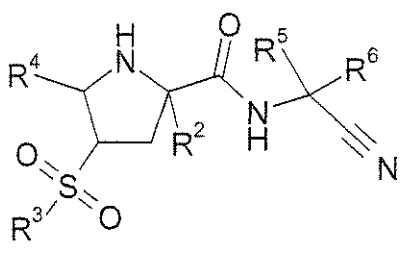
(a) the reaction of a compound of formula (Ia)



(Ia)

in the presence of an amine deprotecting agent;

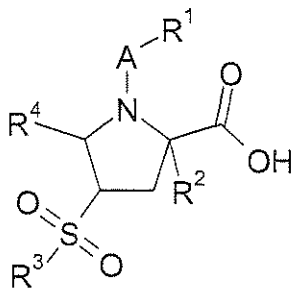
(b) the reaction of a compound of formula (Ib)



(Ib)

in the presence of R^1-A-X; or

(c) the reaction of a compound of formula (Ic)



(Ic)

in the presence of H_2N-CR^5R^6-CN;

wherein A, R^1 to R^6 are as defined above and wherein Y is an amine protecting group.

In a third aspect, there is provided a compound as defined above for use as therapeutically active substance.

In a fourth aspect, there is provided a pharmaceutical composition comprising a compound as defined above and a therapeutically inert carrier.

In a fifth aspect, there is provided the use of a compound as defined above for the preparation of medicaments for the treatment or prophylaxis of diabetes, atherosclerosis, abdominal aortic aneurysm, peripheral arterial disease or diabetic nephropathy.

In a sixth aspect, there is provided a compound as defined above, when manufactured according to a process as defined above.

In the present description the term "alkyl", alone or in combination, signifies a straight-chain or branched-chain alkyl group with 1 to 8 carbon atoms, preferably a straight or branched-chain alkyl group with 1 to 6 carbon atoms and particularly preferred a straight or branched-chain alkyl group with 1 to 4 carbon atoms. Examples of straight-chain and branched C_1-C_8 alkyl groups are methyl, ethyl, propyl, isopropyl, butyl, isobutyl, tert.-butyl, the isomeric pentyls, the isomeric hexyls, the isomeric heptyls and the isomeric octyls, preferably methyl, ethyl, propyl, isopropyl, isobutyl and tert.-butyl.

The term "cycloalkyl", alone or in combination, signifies a cycloalkyl ring with 3 to 8 carbon atoms and preferably a cycloalkyl ring with 3 to 6 carbon atoms. Examples of C_3-C_8 cycloalkyl are cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, and cyclooctyl. Preferred cycloalkyl are cyclopropyl, cyclobutyl, cyclopentyl and cyclohexyl.

The term "alkoxy", alone or in combination, signifies a group of the formula alkyl-O- in which the term "alkyl" has the previously given significance, such as methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy, sec. butoxy and tert.butoxy, preferably methoxy, ethoxy, propoxy, isopropoxy and tert.butoxy.

The term "cycloalkyloxy", alone or in combination, signifies a group of the formula cycloalkyl-O- in which the term "cycloalkyl" has the previously given significance, such as cyclobutyloxy, cyclopentyloxy or cyclohexyloxy.

The term "phenyloxy", alone or in combination, signifies a phenyl-O- group.

The term "oxy", alone or in combination, signifies the -O- group.

The term "halogen" or "halo", alone or in combination, signifies fluorine, chlorine, bromine or iodine and preferably fluorine, chlorine or bromine.

The terms "haloalkyl", "halocycloalkyl" and "haloalkoxy", alone or in combination, denote an alkyl group, a cycloalkyl group and an alkoxy group substituted with at least one