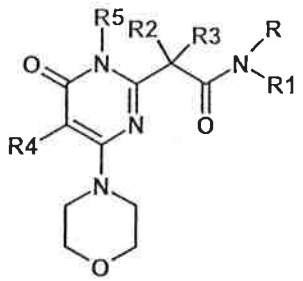
[Claims]

[Claim 1] Compound of formula (I):



in which:

R1 represents an aryl or heteroaryl radical optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and hydroxyl, CN, nitro, -COOH, -COOalkyl, -NRxRy, -CONRxRy, -NRxCORy, -CORy, -NRxCO$_2$Rz, alkoxy, phenoxy, alkylthio, alkyl, alkenyl, alkynyl, cycloalkyl, O-cycloalkyl, heterocycloalkyl, aryl and heteroaryl radicals;

the latter alkoxy, phenoxy, alkylthio, alkyl, alkenyl, alkynyl, heterocycloalkyl, aryl and heteroaryl radicals being themselves optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and hydroxyl, alkoxy, NRvRw, heterocycloalkyl or heteroaryl radicals;

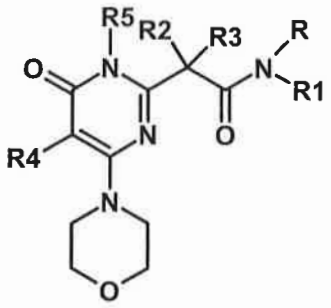
the aryl and heteroaryl radicals being, in addition, optionally substituted with one or more alkyl and alkoxy radicals, themselves optionally substituted with one or more halogen atoms;

it being possible for the heterocycloalkyl and heteroaryl radicals to additionally contain an oxo radical;

R represents a hydrogen atom or else forms, with R1, a saturated or partially or totally unsaturated 5- or 6-membered ring fused to an aryl or heteroaryl residue and optionally containing one or more other heteroatoms chosen from O, S, N, NH and Nalkyl, this bicyclic radical being optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and CO-NH$_2$, hydroxyl, alkyl and alkoxy radicals; the latter alkyl radical being itself optionally substituted with a hydroxyl, alkoxy, NH$_2$, NHalkyl or N(alkyl)$_2$ radical;

R2 and R3, which may be identical or different, independently represent a hydrogen atom, a halogen atom or an alkyl radical optionally substituted with one or more halogen atoms;

R4 represents a hydrogen atom;



in which:

R1 represents an aryl or heteroaryl radical optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and hydroxyl, CN, nitro, -COOH, -COOalkyl, -NRxRy, -CONRxRy, -NRxCORy, -CORy, -$NRxCO_2Rz$, alkoxy, phenoxy, alkylthio, alkyl, alkenyl, alkynyl, cycloalkyl, O-cycloalkyl, heterocycloalkyl, aryl and heteroaryl radicals;

the latter alkoxy, phenoxy, alkylthio, alkyl, alkenyl, alkynyl, heterocycloalkyl, aryl and heteroaryl radicals being themselves optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and hydroxyl, alkoxy, NRvRw, heterocycloalkyl or heteroaryl radicals;

the aryl and heteroaryl radicals being, in addition, optionally substituted with one or more alkyl and alkoxy radicals, themselves optionally substituted with one or more halogen atoms;

it being possible for the heterocycloalkyl and heteroaryl radicals to additionally contain an oxo radical;

R represents a hydrogen atom or else forms, with R1, a saturated or partially or totally unsaturated 5- or 6-membered ring fused to an aryl or heteroaryl residue and optionally containing one or more other heteroatoms chosen from O, S, N, NH and Nalkyl, this bicyclic radical being optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and $CO\text{-}NH_2$, hydroxyl, alkyl and alkoxy radicals; the latter alkyl radical being itself optionally substituted with a hydroxyl, alkoxy, NH_2, NHalkyl or $N(alkyl)_2$ radical;

R2 and R3, which may be identical or different, independently represent a hydrogen atom, a halogen atom or an alkyl radical optionally substituted with one or more halogen atoms;

R4 represents a hydrogen atom;

R5 represents a hydrogen atom or an alkyl radical optionally substituted with one or more halogen atoms;

NRxRy being such that Rx represents a hydrogen atom or an alkyl radical and Ry represents a hydrogen atom or a cycloalkyl radical or an alkyl radical optionally substituted with one or more radicals, which may be identical or different, chosen from hydroxyl, alkoxy, NRvRw and heterocycloalkyl radicals; or Rx and Ry form, with the nitrogen atom to which they are attached, a cyclic radical containing from 3 to 10 ring members and optionally one or more other heteroatoms chosen from O, S, NH and N-alkyl, this radical being optionally substituted;

NRvRw being such that Rv represents a hydrogen atom or an alkyl radical and Rw represents a hydrogen atom or a cycloalkyl radical, CO_2alkyl, or an alkyl radical optionally substituted with one or more radicals, which may be identical or different, chosen from hydroxyl, alkoxy and heterocycloalkyl radicals; or Rv and Rw form, with the nitrogen atom to which they are attached, a cyclic radical containing from 3 to 10 ring members and optionally one or more other heteroatoms chosen from O, S, NH and N-alkyl, this cyclic radical being optionally substituted;

the cyclic radicals that Rx and Ry or Rv and Rw, respectively, can form, with the nitrogen atom to which they are attached, being optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and alkyl, hydroxyl, oxo, alkoxy, NH_2; NHalkyl and $N(alkyl)_2$ radicals;

Rz represents the values of Ry except for hydrogen;

Rx, Ry and Rz in the -NRxCORy, -CORy and $NRxCO_2Rz$ radicals being chosen from the meanings indicated above for Rx, Ry and Rz;

all the above alkyl, alkoxy and alkylthio radicals being linear or branched and containing from 1 to 6 carbon atoms,

said compound of formula (I) being in all the possible racemic, enantiomeric or diastereoisomeric isomer forms, or also the addition salts with inorganic or organic acids or with inorganic or organic bases, of said compound of formula (I).

[Claim 2] Compound of formula (I) as defined in Claim 1, in which:

R_1 represents a phenyl, pyridine, thienyl, benzoxazolyl, benzofuryl, indazolyl, indolyl, benzothienyl, benzimidazolyl, benzoxazinyl or tetrahydroquinolyl radical, optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and CN, nitro, -COOH, -COOalkyl, -NRxRy, alkoxy, alkyl, alkynyl

and cycloalkyl radicals;

the latter alkoxy, alkyl and alkynyl radicals being themselves optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and hydroxyl, alkoxy, NRvRw, piperidyl, pyrrolidinyl or heteroaryl radicals;

the phenyl and heteroaryl radicals being, in addition, optionally substituted with one or more alkyl and alkoxy radicals;

R represents a hydrogen atom or else forms, with R1 a benzoxazinyl, dihydroindolyl, tetrahydroisoquinolyl, tetrahydroquinolyl or dihydropyrrolopyridyl ring, these rings being optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and $CO\text{-}NH_2$, hydroxyl, alkyl and alkoxy radicals;

the latter alkyl radical being itself optionally substituted with a hydroxyl, alkoxy, NH_2, NHalkyl or $N(alkyl)_2$ radical;

R2 and R3, which may be identical or different, independently represent a hydrogen atom, a fluorine atom or an alkyl radical;

R4 represents a hydrogen atom;

R5 represents a hydrogen atom or an alkyl radical;

NRxRy being such that Rx represents a hydrogen atom or an alkyl radical and Ry represents a hydrogen atom or an alkyl radical; or Rx and Ry form, with the nitrogen atom to which they are attached, a cyclic radical containing from 3 to 10 ring members and optionally one or more other heteroatoms chosen from O, S, NH and N-alkyl, this cyclic radical being optionally substituted;

NRvRw being such that Rv represents a hydrogen atom or an alkyl radical and Rw represents a hydrogen atom or an alkyl radical;

all the above alkyl and alkoxy radicals being linear or branched and containing from 1 to 6 carbon atoms,

said compound of formula (I) being in all the possible racemic, enantiomeric or diastereoisomeric isomer forms, or also the addition salts with inorganic or organic acids or with inorganic or organic bases, of said compound of formula (I).

[Claim 3] Compound of formula (I) as defined in either one of Claims 1 and 2, corresponding to one of the following formulae:

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-phenylacetamide
- N-(4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-chlorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-[3-(dimethylamino)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(2,4-difluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3,4-difluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(thiophen-3-yl)acetamide
- N-(4-fluoro-3-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(2-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(2-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(2-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(2,3-difluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3,5-difluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(4-chlorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[3-(trifluoromethyl)phenyl]acetamide
- N-(3-bromophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-[3-(2-methylpropan-2-yl)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- methyl 3-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoate
- 3-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoic acid
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[3-(propan-2-yl)phenyl]acetamide
- N-(3-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-cyano-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(1H-indazol-6-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-cyanophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(5-fluoropyridin-2-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(4-fluoro-3-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-chloro-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(pyridin-3-yl)acetamide
- N-(4-fluoro-2-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-bromo-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(3,4,5-trifluorophenyl)acetamide
- N-[4-fluoro-3-(hydroxymethyl)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-cyclopropylephenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-[3-(difluoromethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(4-fluoro-3-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]propanamide
- N-(2,3-dimethylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(2-fluoro-3-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(1,3-benzoxazol-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[3-(trifluoromethoxy)phenyl]acetamide
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[3-(propan-2-yloxy)phenyl]acetamide
- N-(4-fluoro-2-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-methylpropan-2-yl {2-[3-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)phenyl]ethyl}carbamate
- N-[4-fluoro-3-(trifluoromethyl)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-ethynylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-[3-(cyclopentyloxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(4-fluoro-2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[2-(2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-(3-cyclopropyl-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(2,3,4-trifluorophenyl)acetamide
- N-[4-fluoro-3-(trifluoromethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-[3-(2-hydroxyethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-iodophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- methyl 2-fluoro-5-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoate
- N-(3-ethoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(2,4-difluoro-3-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(2,4,5-trifluorophenyl)acetamide
- N-(3,5-dichloro-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[2-(2,3-dihydro-4H-1,4-benzoxazin-4-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-(4-fluoro-3-nitrophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-fluoro-5-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoic acid
- N-(5-fluoro-2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(2-bromo-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(4-fluorophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-chloro-4-fluorophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-bromophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[1-ethyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(4-fluorophenyl)acetamide
- N-(1H-indol-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(4-fluorophenyl)-3-methyl-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]butanamide
- N-[4-fluoro-3-(methoxymethyl)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(4-fluoro-3-iodophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[3-(1,1,2,2-tetrafluoroethoxy)phenyl]acetamide
- N-[3-(difluoromethyl)-4-fluorophenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2,2-difluoro-N-(4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3,4-difluorophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[2-(2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-(3-bromo-4-fluorophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-[4-fluoro-3-(hydroxymethyl)phenyl]-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-cyclopropylphenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(4-fluoro-3-methoxyphenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(1-benzofur-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-phenylacetamide
- N-(3-cyclopropyl-4-fluorophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-fluoro-2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[2-(4-fluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(4-chloro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-(3-ethynyl-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[2-(4-hydroxy-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(4,6-difluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-(4-fluoro-3-iodophenyl)-2-(1-methyl-4-morpholin-4-yl-6-oxo-1,6-dihydropyrimidin-2-yl)acetamide
- 2-[2-(4,5-difluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-

4(3H)-one
- 2-[2-(6-fluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(2-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-[3-(difluoromethyl)-4-fluorophenyl]-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(3,4,5-trifluorophenyl)acetamide
- N-(1-methyl-1H-indol-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[2-(4-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(3-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(4-fluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(5-fluoro-2,3-dihydroindol-1-yl)-2-oxoethyl]-6-morpholin-4-yl-3H-pyrimidin-4-one
- 2-[2-(4-chloro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-(1-benzothiophen-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-{2-[2-(hydroxymethyl)-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-{2-[2-(piperidin-1-yl)ethoxy]phenyl}acetamide
- N-[2-(2-methoxyethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[2-(4-hydroxy-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(4-methoxy-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(3,4-dihydroisoquinolin-2(1H)-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-

one

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-{2-[2-(pyrrolidin-1-yl)ethoxy]phenyl}acetamide
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[2-(pyridin-3-ylmethoxy)phenyl]acetamide
- 3-methyl-2-[2-(4-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-(2-{3-[(dimethylamino)methyl]-2,3-dihydro-1H-indol-1-yl}-2-oxoethyl)-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(4-bromo-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-{2-[(2S)-2-methyl-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-{2-[(2R)-2-methyl-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 3-methyl-2-[2-(3-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-{2-[2-(methoxymethyl)-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(4-ethoxy-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 1-{[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}-2,3-dihydro-1H-indole-2-carboxamide
- 3-methyl-2-[2-(2-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(6-fluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-{2-[(3S)-3-methyl-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-{2-[(3R)-3-methyl-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(5,6-difluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(4,5-difluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(1,3-dihydro-2H-isoindol-2-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-(1-benzothiophen-4-yl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[2-(5-chloro-3,4-dihydroquinolin-1(2H)-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-{2-[4-(hydroxymethyl)-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-[4-fluoro-2-(piperidin-4-ylmethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[2-(5-chloro-2,3-dihydroindol-1-yl)-2-oxoethyl]-6-morpholin-4-yl-3H-pyrimidin-4-one
- 2-[2-(4-bromo-2,3-dihydroindol-1-yl)-2-oxoethyl]-6-morpholin-4-yl-3H-pyrimidin-4-one
- 2-(2-{(3S)-3-[(dimethylamino)methyl]-2,3-dihydro-1H-indol-1-yl}-2-oxoethyl)-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-(2-{(3R)-3-[(dimethylamino)methyl]-2,3-dihydro-1H-indol-1-yl}-2-oxoethyl)-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-[4-fluoro-2-(2-methoxyethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(1H-benzimidazol-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- methyl 2-hydroxy-3-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoate
- 2-[2-(4-methoxy-2,3-dihydroindol-1-yl)-2-oxoethyl]-6-morpholin-4-yl-3H-pyrimidin-4-one
- N-(3-bromo-2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3,4-dihydro-2H-1,4-benzoxazin-8-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- methyl 5-fluoro-2-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-

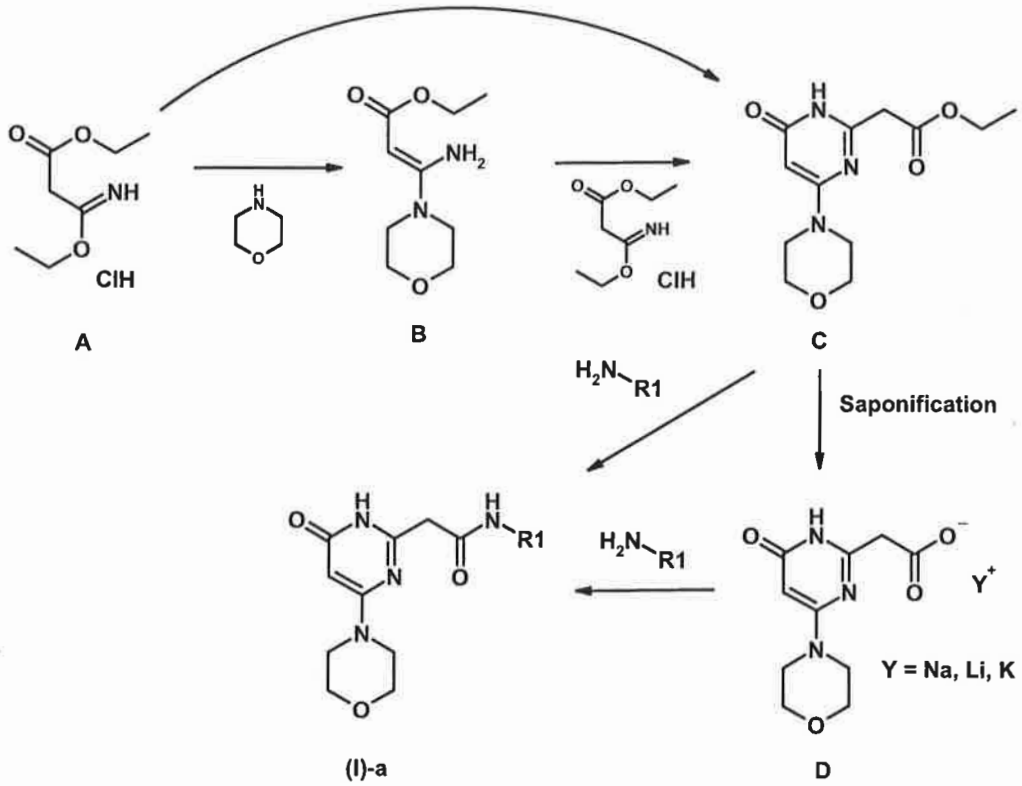
yl]acetyl}amino)benzoate

- 2-(2-{3-[(diethylamino)methyl]-2,3-dihydro-1H-indol-1-yl}-2-oxoethyl)-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(2,3-dihydro-1H-pyrrolo[3,2-b]pyridin-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- 2-[2-(5,6-difluoro-2,3-dihydroindol-1-yl)-2-oxoethyl]-6-morpholin-4-yl-3H-pyrimidin-4-one
- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(1,2,3,4-tetrahydroquinolin-8-yl)acetamide
- 2-[2-(8-chloro-2,3-dihydro-4H-1,4-benzoxazin-4-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one
- N-(2-hydroxy-3-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(2-hydroxy-3-nitrophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-(3-cyano-2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- N-[2-hydroxy-3-(trifluoromethyl)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide
- 2-[2-(3,3-dimethyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

or also the addition salts with inorganic or organic acids or with inorganic or organic bases, of said compounds of formula (I).

[Claim 4] Process for preparing the compound of formula (I) as defined in any one of Claims 1 to 3, according to scheme 1A as defined hereinafter:

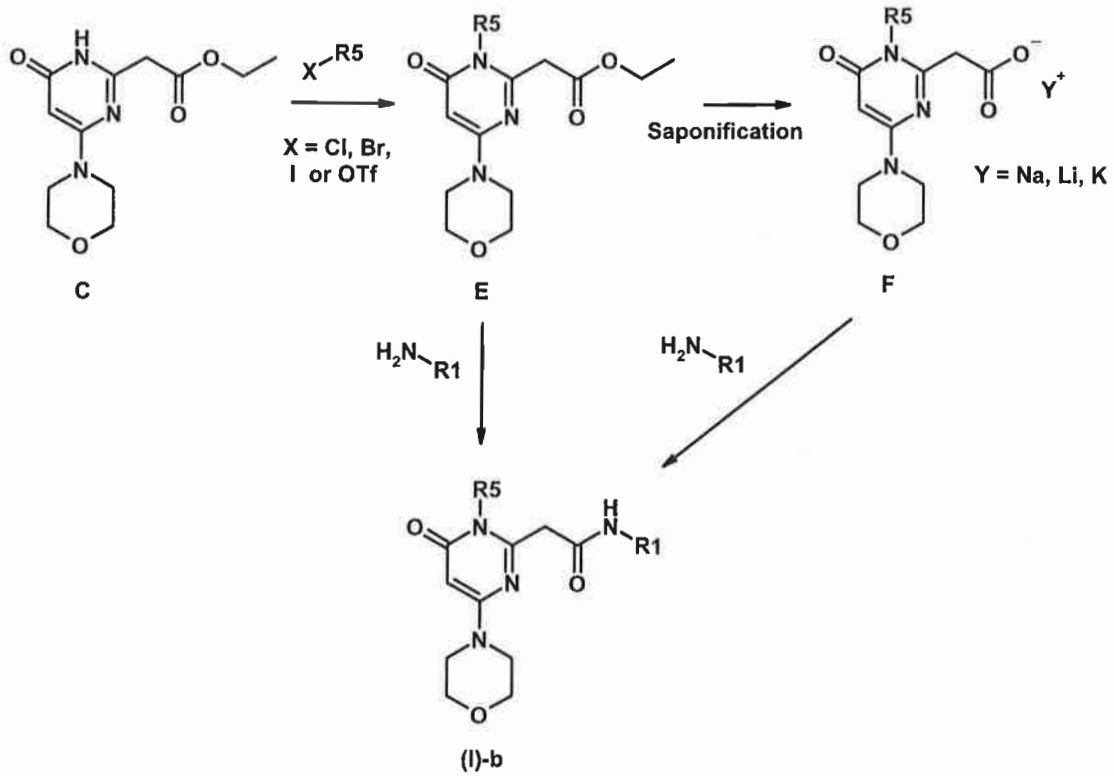
Scheme 1A:



in which the substituent R1 has the meanings indicated in either one of Claims 1 and 2.

[Claim 5] Process for preparing the compound of formula (I) as defined in any one of Claims 1 to 3, according to scheme 1B as defined hereinafter:

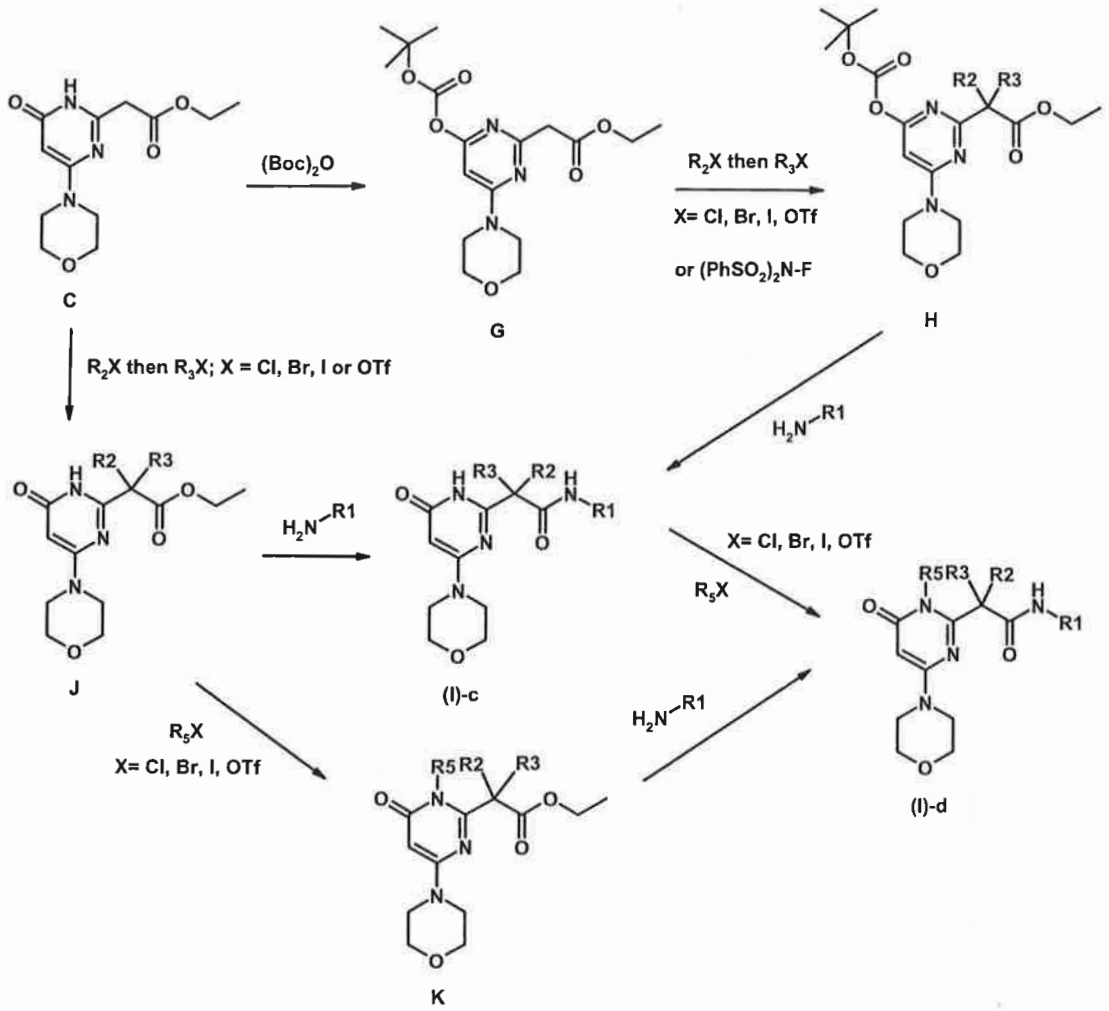
Scheme 1B:



in which the substituents R1 and R5 have the meanings indicated in either one of Claims 1 and 2.

[Claim 6] Process for preparing the compound of formula (I) as defined in any one of Claims 1 to 3 according to scheme 1C as defined hereinafter:

Scheme 1C:



in which the substituents R1, R2, R3 and R5 have the meanings indicated in either one of Claims 1 and 2.

[Claim 7] A pharmaceutical composition comprising the compound of formula (I) as defined in any one of Claims 1 to 3, or the pharmaceutically acceptable addition salts with an inorganic or organic acid or with an inorganic or organic base, of said compound of formula (I).

[Claim 8] A pharmaceutical composition comprising the compound of formula (I) as defined in Claim 3, or the pharmaceutically acceptable addition salts with an inorganic or organic acid or with an inorganic or organic base, of said compound of formula (I).

[Claim 9] Pharmaceutical compositions containing, as active ingredient, at least one of the compounds of formula (I) as defined in any one of Claims 1 to 3, or a

pharmaceutically acceptable salt of this compound, and a pharmaceutically acceptable carrier.

[Claim 10] The pharmaceutical composition as defined in any one of Claims 7 to 9, for the treatment of cancers.

[Claim 11] The pharmaceutical composition as defined in any one of Claims 7 to 9, for the treatment of solid or liquid tumours.

[Claim 12] The pharmaceutical composition as defined in any one of Claims 7 to 9, for the treatment of cancers resistant to cytotoxic agents.

[Claim 13] The pharmaceutical composition as defined in any one of Claims 7 to 9, for the treatment of primary tumours and/or of metastases.

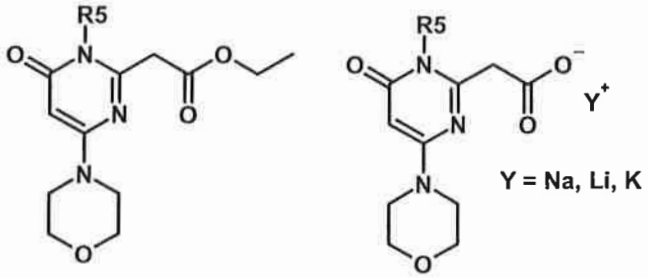
[Claim 14] The pharmaceutical composition according to Claim 13, for the treatment in gastric, hepatic, renal, ovarian, colon, prostate, endometrial and lung (NSCLC and SCLC) cancers, glioblastomas, thyroid, bladder and breast cancers, in melanoma, in lymphoide or myeloid hematopoietic tumours, in sarcomas, in brain, larynx and lymphatic system cancers, bone and pancreatic cancers, and in hamartomas.

[Claim 15] The pharmaceutical composition as defined in any one of Claims 7 to 9, for cancer chemotherapy.

[Claim 16] The pharmaceutical composition as defined in any one of Claims 7 to 9, for cancer chemotherapy, alone or in combination.

[Claim 17] The pharmaceutical composition as defined in any one of Claims 7 to 9, for inhibiting AKT (PKB) phosphorylation.

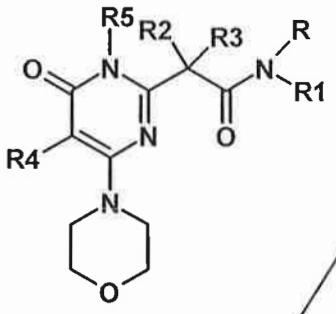
[Claim 18] A method of using the compound of formula C, D, E or F as defined in Claims 4 or 5 above and recalled below:



in which R5 has the definition indicated in either one of Claims 1 and 2, as intermediates for the preparation of the compound represented by formula (I) of Claim 1.

CLAIMS

1) Products of formula (I):



in which:

R1 represents an aryl or heteroaryl radical optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and hydroxyl, CN, nitro, -COOH, -COOalk, -NRxRy, -CONRxRy, -NRxCORy, -CORy, -NRxCO$_2$Rz, alkoxy, phenoxy, alkylthio, alkyl, alkenyl, alkynyl, cycloalkyl, O-cycloalkyl, heterocycloalkyl, aryl and heteroaryl radicals;

the latter alkoxy, phenoxy, alkylthio, alkyl, alkenyl, alkynyl, heterocycloalkyl, aryl and heteroaryl radicals being themselves optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and hydroxyl, alkoxy, NRvRw, heterocycloalkyl or heteroaryl radicals;

the aryl and heteroaryl radicals being, in addition, optionally substituted with one or more alkyl and alkoxy radicals, themselves optionally substituted with one or more halogen atoms;

it being possible for the heterocycloalkyl and heteroaryl radicals to additionally contain an oxo radical;

R represents a hydrogen atom or else forms, with R1, a saturated or partially or totally unsaturated 5- or 6-membered ring fused to an aryl or heteroaryl residue and optionally containing one or more other heteroatoms chosen from O, S, N, NH and Nalk, this bicyclic radical being optionally substituted with one or more radicals, which may be identical or different, chosen from

halogen atoms and CO-NH_2, hydroxyl, alkyl and alkoxy radicals; the latter alkyl radical being itself optionally substituted with a hydroxyl, alkoxy, NH_2, NHalk or $N(alk)_2$ radical;

R2 and R3, which may be identical or different, independently represent a hydrogen atom, a halogen atom or an alkyl radical optionally substituted with one or more halogen atoms;

R4 represents a hydrogen atom;

R5 represents a hydrogen atom or an alkyl radical optionally substituted with one or more halogen atoms;

NRxRy being such that Rx represents a hydrogen atom or an alkyl radical and Ry represents a hydrogen atom or a cycloalkyl radical or an alkyl radical optionally substituted with one or more radicals, which may be identical or different, chosen from hydroxyl, alkoxy, NRvRw and heterocycloalkyl radicals; or Rx and Ry form, with the nitrogen atom to which they are attached, a cyclic radical containing from 3 to 10 ring members and optionally one or more other heteroatoms chosen from O, S, NH and N-alkyl, this radical being optionally substituted;

NRvRw being such that Rv represents a hydrogen atom or an alkyl radical and Rw represents a hydrogen atom or a cycloalkyl radical, CO_2alk, or an alkyl radical optionally substituted with one or more radicals, which may be identical or different, chosen from hydroxyl, alkoxy and heterocycloalkyl radicals; or Rv and Rw form, with the nitrogen atom to which they are attached, a cyclic radical containing from 3 to 10 ring members and optionally one or more other heteroatoms chosen from O, S, NH and N-alkyl, this cyclic radical being optionally substituted;

the cyclic radicals that Rx and Ry or Rv and Rw, respectively, can form, with the nitrogen atom to which they are attached, being optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and alkyl, hydroxyl, oxo, alkoxy, NH_2; NHalk and $N(alk)_2$ radicals;

Rz represents the values of Ry except for hydrogen;

Rx, Ry and Rz in the -NRxCORy, -CORy and $NRxCO_2Rz$ radicals being chosen from the meanings indicated above for Rx, Ry and Rz;

all the above alkyl (alk), alkoxy and alkylthio radicals being linear or branched and containing from 1 to 6 carbon atoms,

said products of formula (I) being in all the possible racemic, enantiomeric and diastereoisomeric isomer forms, and also the addition salts with inorganic and organic acids or with inorganic and organic bases, of said products of formula (I).

2) Products of formula (I) as defined in Claim 1, in which:

R_1 represents a phenyl, pyridine, thienyl, benzoxazolyl, benzofuryl, indazolyl, indolyl, benzothienyl, benzimidazolyl, benzoxazinyl or tetrahydroquinolyl radical, optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and CN, nitro, -COOH, -COOalk, -NRxRy, alkoxy, alkyl, alkynyl and cycloalkyl radicals;

the latter alkoxy, alkyl and alkynyl radicals being themselves optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and hydroxyl, alkoxy, NRvRw, piperidyl, pyrrolidinyl or heteroaryl radicals;

the phenyl and heteroaryl radicals being, in addition, optionally substituted with one or more alkyl and alkoxy radicals;

R represents a hydrogen atom or else forms, with a benzoxazinyl, dihydroindolyl, tetrahydroisoquinolyl, tetrahydroquinolyl or dihydropyrrolopyridyl ring, these rings being optionally substituted with one or more radicals, which may be identical or different, chosen from halogen atoms and $CO\text{-}NH_2$, hydroxyl, alkyl and alkoxy radicals;

the latter alkyl radical being itself optionally substituted with a hydroxyl, alkoxy, NH_2, NHalk or $N(alk)_2$ radical;

R2 and R3, which may be identical or different, independently represent a hydrogen atom, a fluorine atom or an alkyl radical;

R4 represents a hydrogen atom;

R5 represents a hydrogen atom or an alkyl radical;

NRxRy being such that Rx represents a hydrogen atom or an alkyl radical and Ry represents a hydrogen atom or an alkyl radical; or Rx and Ry form, with the nitrogen atom to which they are attached, a cyclic radical containing from 3 to 10 ring members and optionally one or more other heteroatoms chosen from O, S, NH and N-alkyl, this cyclic radical being optionally substituted;

NRvRw being such that Rv represents a hydrogen atom or an alkyl radical and Rw represents a hydrogen atom or an alkyl radical;

all the above alkyl (alk) and alkoxy radicals being linear or branched and containing from 1 to 6 carbon atoms,

said products of formula (I) being in all the possible racemic, enantiomeric and diastereoisomeric isomer forms, and also the addition salts with inorganic and organic acids or with inorganic and organic bases, of said products of formula (I).

3) Products of formula (I) as defined in either one of Claims 1 and 2, corresponding to the following formulae:

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-phenylacetamide

- N-(4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-chlorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-[3-(dimethylamino)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(2,4-difluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3,4-difluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(thiophen-3-yl)acetamide

- N-(4-fluoro-3-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(2-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(2-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(2-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(2,3-difluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3,5-difluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(4-chlorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[3-(trifluoromethyl)phenyl]acetamide

- N-(3-bromophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-[3-(2-methylpropan-2-yl)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- methyl 3-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoate

- 3-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoic acid

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[3-(propan-2-yl)phenyl]acetamide

- N-(3-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-cyano-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(1H-indazol-6-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-cyanophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(5-fluoropyridin-2-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(4-fluoro-3-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-chloro-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(pyridin-3-yl)acetamide

- N-(4-fluoro-2-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-bromo-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(3,4,5-trifluorophenyl)acetamide

- N-[4-fluoro-3-(hydroxymethyl)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-cyclopropylephenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-[3-(difluoromethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(4-fluoro-3-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]propanamide

- N-(2,3-dimethylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(2-fluoro-3-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(1,3-benzoxazol-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[3-(trifluoromethoxy)phenyl]acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[3-(propan-2-yloxy)phenyl]acetamide

- N-(4-fluoro-2-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-methylpropan-2-yl {2-[3-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)phenyl]ethyl}carbamate

- N-[4-fluoro-3-(trifluoromethyl)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-ethynylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-[3-(cyclopentyloxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(4-fluoro-2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[2-(2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-(3-cyclopropyl-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(2,3,4-trifluorophenyl)acetamide

- N-[4-fluoro-3-(trifluoromethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-[3-(2-hydroxyethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-iodophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- methyl 2-fluoro-5-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoate

- N-(3-ethoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(2,4-difluoro-3-methoxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(2,4,5-trifluorophenyl)acetamide

- N-(3,5-dichloro-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[2-(2,3-dihydro-4H-1,4-benzoxazin-4-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-(4-fluoro-3-nitrophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-fluoro-5-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoic acid

- N-(5-fluoro-2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(2-bromo-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(4-fluorophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-chloro-4-fluorophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-bromophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[1-ethyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(4-fluorophenyl)acetamide

- N-(1H-indol-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(4-fluorophenyl)-3-methyl-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]butanamide

- N-[4-fluoro-3-(methoxymethyl)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(4-fluoro-3-iodophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[3-(1,1,2,2-tetrafluoroethoxy)phenyl]acetamide

- N-[3-(difluoromethyl)-4-fluorophenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2,2-difluoro-N-(4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3,4-difluorophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[2-(2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-(3-bromo-4-fluorophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-[4-fluoro-3-(hydroxymethyl)phenyl]-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-cyclopropylphenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(4-fluoro-3-methoxyphenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(1-benzofur-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-phenylacetamide

- N-(3-cyclopropyl-4-fluorophenyl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-fluoro-2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[2-(4-fluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(4-chloro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-(3-ethynyl-4-fluorophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[2-(4-hydroxy-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(4,6-difluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-(4-fluoro-3-iodophenyl)-2-(1-methyl-4-morpholin-4-yl-6-oxo-1,6-dihydropyrimidin-2-yl)acetamide

- 2-[2-(4,5-difluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(6-fluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(2-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-[3-(difluoromethyl)-4-fluorophenyl]-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(3,4,5-trifluorophenyl)acetamide

- N-(1-methyl-1H-indol-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[2-(4-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(3-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(4-fluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(5-fluoro-2,3-dihydroindol-1-yl)-2-oxoethyl]-6-morpholin-4-yl-3H-pyrimidin-4-one

- 2-[2-(4-chloro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-(1-benzothiophen-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-{2-[2-(hydroxymethyl)-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-{2-[2-(piperidin-1-yl)ethoxy]phenyl}acetamide

- N-[2-(2-methoxyethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[2-(4-hydroxy-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(4-methoxy-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(3,4-dihydroisoquinolin-2(1H)-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-{2-[2-(pyrrolidin-1-yl)ethoxy]phenyl}acetamide

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-[2-(pyridin-3-ylmethoxy)phenyl]acetamide

- 3-methyl-2-[2-(4-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-(2-{3-[(dimethylamino)methyl]-2,3-dihydro-1H-indol-1-yl}-2-oxoethyl)-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(4-bromo-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-{2-[(2S)-2-methyl-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-{2-[(2R)-2-methyl-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 3-methyl-2-[2-(3-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-{2-[2-(methoxymethyl)-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(4-ethoxy-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 1-{[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}-2,3-dihydro-1H-indole-2-carboxamide

- 3-methyl-2-[2-(2-methyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(6-fluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-{2-[(3S)-3-methyl-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-{2-[(3R)-3-methyl-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(5,6-difluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(4,5-difluoro-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-3-methyl-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(1,3-dihydro-2H-isoindol-2-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-(1-benzothiophen-4-yl)-2-[1-methyl-4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[2-(5-chloro-3,4-dihydroquinolin-1(2H)-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-{2-[4-(hydroxymethyl)-2,3-dihydro-1H-indol-1-yl]-2-oxoethyl}-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-[4-fluoro-2-(piperidin-4-ylmethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[2-(5-chloro-2,3-dihydroindol-1-yl)-2-oxoethyl]-6-morpholin-4-yl-3H-pyrimidin-4-one

- 2-[2-(4-bromo-2,3-dihydroindol-1-yl)-2-oxoethyl]-6-morpholin-4-yl-3H-pyrimidin-4-one

- 2-(2-{(3S)-3-[(dimethylamino)methyl]-2,3-dihydro-1H-indol-1-yl}-2-oxoethyl)-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-(2-{(3R)-3-[(dimethylamino)methyl]-2,3-dihydro-1H-indol-1-yl}-2-oxoethyl)-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-[4-fluoro-2-(2-methoxyethoxy)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(1H-benzimidazol-4-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- methyl 2-hydroxy-3-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoate

- 2-[2-(4-methoxy-2,3-dihydroindol-1-yl)-2-oxoethyl]-6-morpholin-4-yl-3H-pyrimidin-4-one

- N-(3-bromo-2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3,4-dihydro-2H-1,4-benzoxazin-8-yl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- methyl 5-fluoro-2-({[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetyl}amino)benzoate

- 2-(2-{3-[(diethylamino)methyl]-2,3-dihydro-1H-indol-1-yl}-2-oxoethyl)-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(2,3-dihydro-1H-pyrrolo[3,2-b]pyridin-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- 2-[2-(5,6-difluoro-2,3-dihydroindol-1-yl)-2-oxoethyl]-6-morpholin-4-yl-3H-pyrimidin-4-one

- 2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]-N-(1,2,3,4-tetrahydroquinolin-8-yl)acetamide

- 2-[2-(8-chloro-2,3-dihydro-4H-1,4-benzoxazin-4-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

- N-(2-hydroxy-3-methylphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(2-hydroxy-3-nitrophenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- N-(3-cyano-2-hydroxyphenyl)-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

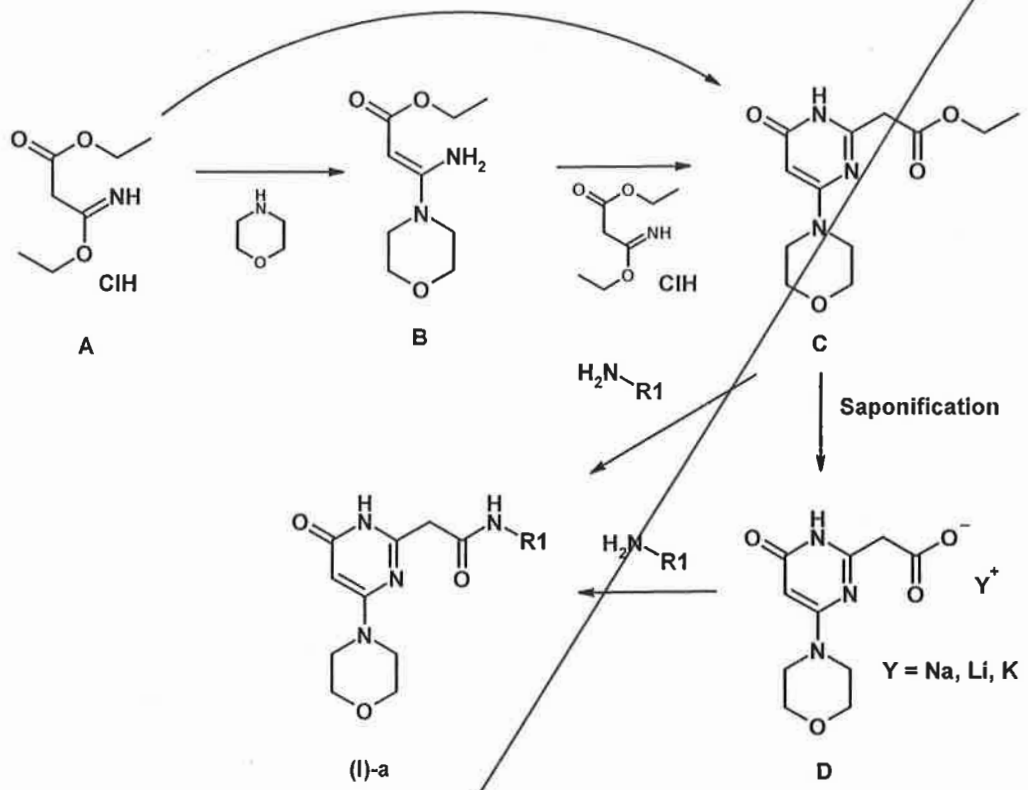
- N-[2-hydroxy-3-(trifluoromethyl)phenyl]-2-[4-(morpholin-4-yl)-6-oxo-1,6-dihydropyrimidin-2-yl]acetamide

- 2-[2-(3,3-dimethyl-2,3-dihydro-1H-indol-1-yl)-2-oxoethyl]-6-(morpholin-4-yl)pyrimidin-4(3H)-one

and also the addition salts with inorganic and organic acids or with inorganic and organic bases, of said products of formula (I).

4) Process for preparing the products of formula (I) as defined in any one of Claims 1 to 3, according to scheme 1A as defined hereinafter:

Scheme 1A:

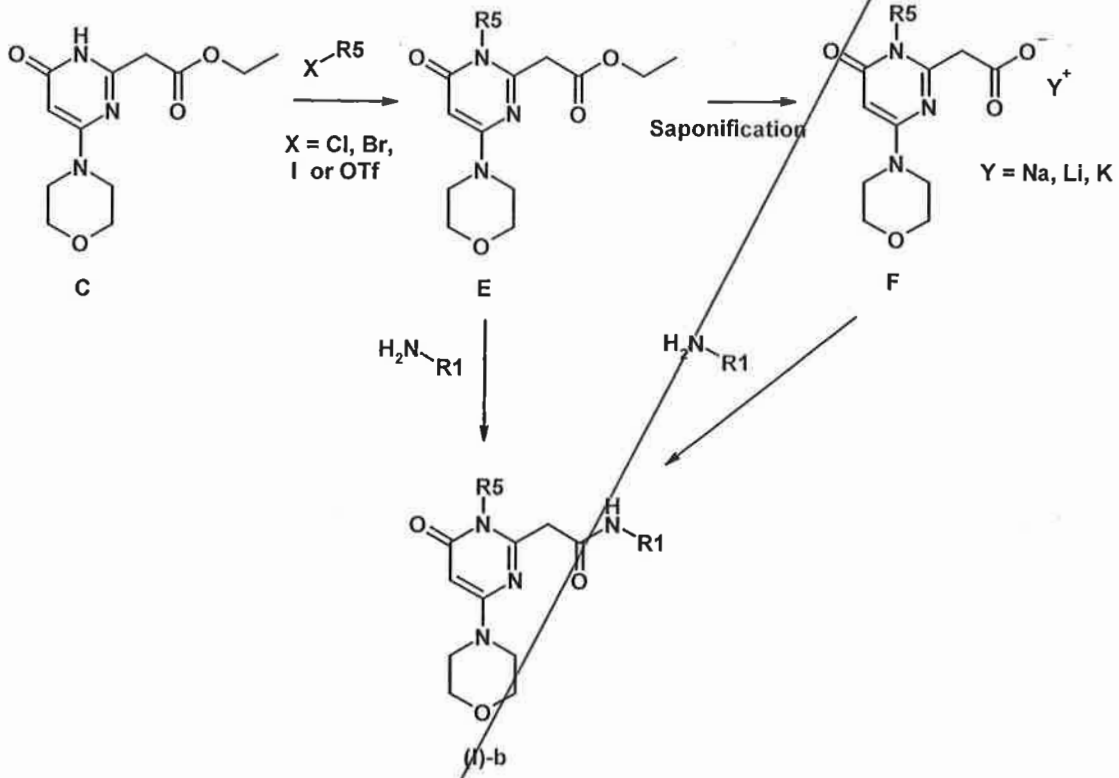


in which the substituent R1 has the meanings indicated in either one of Claims 1 and 2.

5

5) Process for preparing the products of formula (I) as defined in any one of Claims 1 to 3, according to scheme 1B as defined hereinafter:

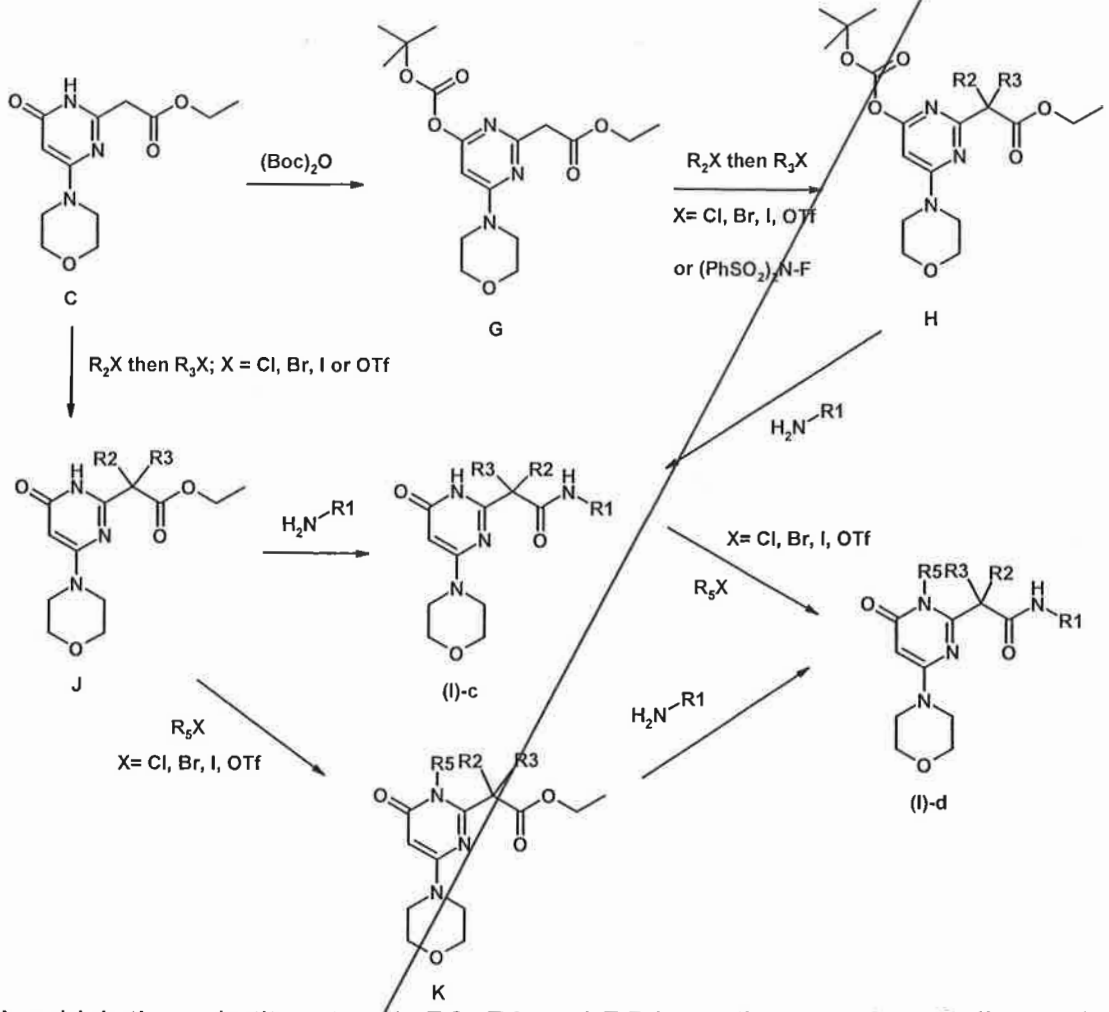
Scheme 1B:



in which the substituents R1 and R5 have the meanings indicated in either one of Claims 1 and 2.

6) Process for preparing the products of formula (I) as defined in any one of Claims 1 to 3 according to scheme 1C as defined hereinafter:

Scheme 1C:



in which the substituents R1, R2, R3 and R5 have the meanings indicated in either one of Claims 1 and 2.

7) As medicaments, the products of formula (I) as defined in any one of Claims 1 to 3, and also the pharmaceutically acceptable addition salts with inorganic and organic acids or with inorganic and organic bases, of said products of formula (I).

8) As medicaments, the products of formula (I) as defined in Claim 3, and also the pharmaceutically acceptable addition salts with inorganic and organic acids or with inorganic and organic bases, of said products of formula (I).

9) Pharmaceutical compositions containing, as active ingredient, at least one of the products of formula (I) as defined in any one of Claims 1 to 3, or a pharmaceutically acceptable salt of this product or a prodrug of this product, and a pharmaceutically acceptable carrier.

10) Products of formula (I) as defined in any one of Claims 1 to 3, for their use in the treatment of cancers.

11) Products of formula (1) as defined in any one of Claims 1 to 3, for their use in the treatment of solid or liquid tumours.

12) Products of formula (1) as defined in any one of Claims 1 to 3, for their use in the treatment of cancers resistant to cytotoxic agents.

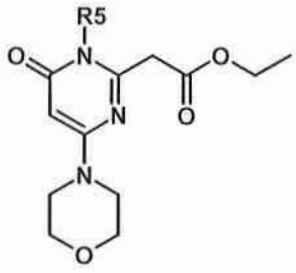
13) Products of formula (1) as defined in any one of Claims 1 to 3, for their use in the treatment of primary tumours and/or of metastases, in particular in gastric, hepatic, renal, ovarian, colon, prostate, endometrial and lung (NSCLC and SCLC) cancers, glioblastomas, thyroid, bladder and breast cancers, in melanoma, in lymphoide or myeloid hematopoietic tumours, in sarcomas, in brain, larynx and lymphatic system cancers, bone and pancreatic cancers, and in hamartomas.

14) Products of formula (I) as defined in any one of Claims 1 to 3, for their use in cancer chemotherapy.

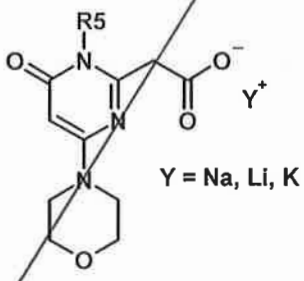
15) Products of formula (I) as defined in any one of Claims 1 to 3, for their use in cancer chemotherapy, alone or in combination.

16) Products of formula (I) as defined in any one of Claims 1 to 3, as inhibitors of AKT (PKB) phosphorylation.

17) As novel industrial products, the synthesis intermediates of formulae C, D, E and F as defined in Claim 4 above and recalled below:



C,E



Y = Na, Li, K

D, F

in which R5 has the definition indicated in either one of Claims 1 and 2.