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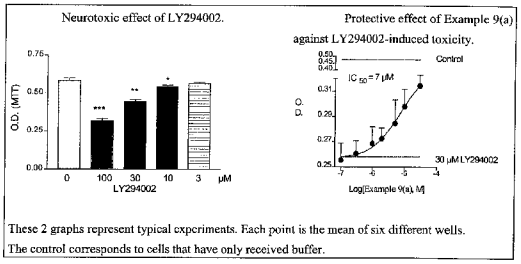
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(54) Title: INDOLIZINES AS KINASE PROTEIN INHIBITORS



These 2 graphs represent typical experiments. Each point is the mean of six different wells.
The control corresponds to cells that have only received buffer.

(57) Abstract: The present invention concerns compounds of general formula (I): in which: R1 represents hydrogen, R4, -C(=Y)-NHR4, -SO2NHR4, -C(=Z1)-R4, -SO2-R4 or -C(=Z1)-OR4; R2 represents hydrogen, cyano, halogen or -C°C-R5;R3 represents hydrogen, acyl, alkoxycarbonyl, alkyl, aroyl, aryl, aryloxycarbonyl, carboxy, cycloalkenyl, cycloalkyl, heteroaroyl, heteroaryl, heterocycloalkyl or -C(=O)-NY1Y2; R4 represents optionally substituted alkyl, cycloalkyl, cycloalkenyl ,heterocycloalkyl, aryl or heteroaryl R5 represents hydrogen or alkyl;R6 represents alkyl, acyl, alkoxycarbonyl, alkylsulfonyl, aryl, arylsulfonyl, aroyl, cycloalkyl, cycloalkenyl, heteroaryl, heteroarylsulfonyl, heteroaroyl and heterocycloalkyl;R7 represents optionally substituted alkyl, cycloalkyl or cycloalkylalkyl, R8 represents hydrogen, alkyl, alkenyl, aryl, arylalkyl, heteroaryl or heteroarylalkyl;R9 represents alkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, heterocycloalkyl or heterocycloalkylalkyl; R10 represents hydrogen or lower alkyl;R11 represents alkyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroarylalkyl, heterocycloalkyl or heterocycloalkylalkyl; or alkyl optionally substituted by -NY1Y2;R12 represents aryl or heteroaryl; or alkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl or heterocycloalkylalkyl each optionally substituted Y represents O, S or NCN;Y1 and Y2 (Y3 and Y4) are independently in particular hydrogen, alkyl, aryl, cycloalkyl, cycloalkenyl, heteroaryl or heterocycloalkyl; or the group -NY1Y2 may form 5-7 membered ring or the group -NY3Y4 (-NY5Y6) may form a cyclic amine;Z (Z1)represents O or S; Z2 represents O or S(O)p;n is zero or an integer 1 or 2; m is 1 or 2;p is 1 or 2;and their corresponding N-oxides, their prodrugs; their pharmaceutically acceptable salts and solvates (e.g. hydrates), also together with one or more pharmaceutically acceptable carriers or excipients, such novel indolizines derivatives with inhibitory effects towards kinase proteins and especially for use for preventing or treating diseases that may be modulated by the inhibition of such kinase proteins and particularly solid tumours.

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