

Title (en)

HYDROLYZABLE PRODRUGS FOR DELIVERY OF ANTICANCER DRUGS TO METASTATIC CELLS

Title (de)

HYDROLISIERBARE PRODRUGS ZUR VERABREICHUNG VON WIRKSTOFFEN GEGEN KREBS AN METASTATISCHE ZELLEN

Title (fr)

PROMEDICAMENTS HYDROLYSABLES POUR LA LIBERATION DE MEDICAMENTS ANTICANCEREUX DANS DES CELLULES METASTATIQUES

Publication

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Application

EP 97944519 A 19970925

Priority

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- US 4433496 P 19960927

Abstract (en)

[origin: WO9813059A1] Hydrolyzable prodrugs according to the present invention are activated by proteases located in the cell membranes of metastatic cells to yield active anticancer drugs that can be taken up by the metastatic cells. In general, a hydrolyzable prodrug according to the present invention comprises an amino-terminal capped peptide that is a substrate for a peptidohydrolase located on the surface of a metastatic cell covalently linked to a therapeutic drug through a self-immolating spacer of sufficient length to prevent the occurrence of steric hindrance. The therapeutic drug is typically an anticancer drug. The anticancer drug is typically doxorubicin, taxol, camptothecin, mitomycin C, or esperamycin. Typically, the peptidohydrolase that hydrolyses the substrate of the hydrolyzable prodrug is cathepsin B.

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Citation (search report)

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- [X] DUBOWCHIK, GENE M. ET AL: "Cathepsin B-sensitive dipeptide prodrugs. 2. Models of anticancer drugs paclitaxel (taxol), mitomycin C and doxorubicin", BIOORG. MED. CHEM. LETT. (1998), 8(23), 3347-3352, XP002172917
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- See references of WO 9813059A1

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