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carbohydrates

U 0500 22 - 144 Sialidase Inhibitors Related to Zanamivir. Further SAR Studies of 4-Amino-4H-pyran-2-carboxylic Acid-6-propylamides. — SAR investigations of the 4- and 5-positions of a series of 4-amino-4H-pyran-2-carboxylic acid 6-carboxamides (I), (II) are reported. Potent inhibitors of influenza A sialidase with marked selectivity over the influenza B enzyme are obtained when the basic 4-amino substituent is replaced by a hydroxyl or even deleted. Modifications at the 5-position exhibit a tight steric requirement, with trifluoroacetic acid being optimal. — (WYATT, PAUL G.; COOMBER, BARRY A.; EVANS, DEREK N.; JACK, TORQUIL I.; FULTON, HEATHER E.; WONACOTT, ALAN J.; COLMAN, PETER; VARGHESE, JOSE; Bioorg. Med. Chem. Lett. 11 (2001) 5, 669-673; Dep. Med. Chem., GlaxoWellcome Med. Res. Cent., Stevenage, Hertfordshire SG1 2NY, UK; EN)

$$\begin{array}{c} R^{4} \\ & \\ HN \\ & \\ NH_{2} \\ & \\ II^{4} \\ a \ R^{3} : -Aa : R^{4} : -Pr \\ b \ R^{3} : -CO-iPr : R^{4} : -Pr \\ c \ R^{3} : -CO-G_{3} : R^{4} : -Pr \\ d \ R^{3} : -SO_{2}-Me : R^{4} : -Pr \\ e \ R^{3} : -CO-Pr : R^{4} : -(CH_{2})_{2}-Ph \\ f \ R^{3} : -Ac : R^{4} : -(CH_{2})_{2}-Ph \\ g \ R^{3} : -CO-G_{3} : R^{4} : -(CH_{2})_{2}-Ph \\ g \ R^{3} : -CO-G_{3} : R^{4} : -(CH_{2})_{2}-Ph \\ \end{array}$$

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