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(54) Title (EN): METHOD FOR OBTAINING DERIVATIVES OF [[(PYRIDIL SUBSTITUTED)METHYL]THIO]BENZIMIDAZOL

(54) Title (FR): PROCEDE PERMETTANT D'OBTENIR DES DERIVES DE [[(PYRIDIL SUBSTITUE)METHYL]THIO]BENZIMIDAZOLE

(54) Title (ES): PROCEDIMIENTO PARA LA OBTENCIÓN DE DERIVADOS DE [[(PIRIDIL SUSTITUIDO)METIL]TIO]BENCIMIDAZOL

(57) Abstract:

(EN): The invention relates to a method for obtaining derivatives of [[(pyridil substituted)methyl]thio] benzimidazol (I), wherein R_1, R_3 and R_4 independently represent hydrogen, alkyl, alkoxy or fluorinated alkoxy with 1 to 6 carbon atoms; R_2 represents nitro, halogen, alkoxy or halogenated alkoxy with 1 to 6 carbon atoms or a $-O-(CH_2)_n-OR_8$ group, wherein n is a whole number from 1 to 6 and R_8 represents hydrogen or an alkyl group with 1 to 6 carbon atoms. The method involves the following steps: (a) reacting a methylpyridine N-oxide with a carboxylic acid or sulfonic acid anhydride and (b) reacting the intermediate product formed in step (a) with a corresponding mercaptobenzimidazole. The compounds (I) are useful for synthesizing [[(pyridil substituted)methyl]thio] benzimidazol, for instance, omeprazole, lansoprazole, rabeprazole o pantoprazole.

(FR): L'invention concerne un procédé permettant d'obtenir des dérivés de [[(pyridil substitué)méthyl]thio]benzimidazole (I), dans lequel R_1, R_3 et R_4, représentent chacun indépendamment, hydrogène, alkyle, alcoxy ou alcoxy fluoré contenant entre 1 et 6 atomes de carbone, et R_2 représente nitro, halogène, alcoxy ou alcoxy halogéné contenant entre 1 à 6 atomes de carbone ou un groupe $-O-(CH_2)_n-OR_8$, dans lequel n vaut un entier compris entre 1 et 6 et R_8 représente hydrogène ou un groupe alkyle contenant entre 1 et 6 atomes de carbone. Ce procédé consiste (a) à faire réagir un N-oxyde d'une méthylpyridine avec un anhydride d'acide carboxylique activé ou d'acide sulfonique, et (b) à faire réagir l'intermédiaire formé dans l'étape (a) avec un mercaptobenzimidazole correspondant. Les composés selon l'invention (I) conviennent pour synthétiser des dérivés de [[(pyridil substitué)méthyl]thio]benzimidazole, tels que l'oméprazole, le lansoprazole, le rabeprazole ou le pantoprazole.

(ES): El procedimiento para la obtención de derivados de [[(piridil sustituido)metil]tio]bencimidazol (I), donde cada uno de R1, R3 y R4, independientemente entre sí, es hidrógeno, alquilo, alcoxi o alcoxi fluorado de 1 a 6 átomos de carbono, y R2 es nitro, halógeno, alcoxi o alcoxi halogenado de 1 a 6 átomos de carbono, o un grupo -O-(CH2)n-OR8, donde n es un número entero comprendido entre 1 y 6, y R8 representa hidrógeno o un grupo alquilo de 1 a 6 átomos de carbono, comprende (a) hacer reaccionar un N-óxido de una metilpiridina con un anhídrido de ácido carboxílico activado o de ácido sulfónico, y (b) hacer reaccionar el intermedio formado en la etapa (a) con un mercaptobencimidazol correspondiente. Los compuestos (I) son útiles para sintetizar derivados de [[(piridil sustituido)metil]sulfinil]bencimidazol, como por ejemplo omeprazol, lansoprazol, rabeprazol o pantoprazol.

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