

Title (en)

SYNTHESIS OF 3,5-DIHYDROXY-7-PYRROL-1-YL HEPTANOIC ACIDS

Title (de)

SYNTHESE VON 3,5-DIHYDROXY-7-PYRROL-1-YL-HEPTANSÄUREN

Title (fr)

SYNTHESE D'ACIDES 3,5-DIHYDROXY-7-PYRROL-1-YLE HEPTANOIQUES

Publication

**EP 1480943 A2 20041201 (EN)**

Application

**EP 03786885 A 20031117**

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- US 48338103 P 20030627

Abstract (en)

[origin: WO2004046105A2] Atorvastatin and related 3,5-dihydroxy-7-pyrrol-1-yl heptanoic acids can be made by oxidation of a 3,5-dihydroxy-7-pyrrol-1-yl heptanol precursor from novel but readily accessible starting materials. Silylether-protected 7-amino-3,5-dihydroxy heptanoic acid esters undergo Paal Knorr reaction with 1,4-diketones to give valuable silylether-diprotected 3,5-dihydroxy-7-pyrrol-1-yl heptanoic acid ester intermediates for preparing atorvastatin. The Paal Knorr reaction of ketal-protected 7-amino-3R, 5R-dihydroxy heptanoic acid esters with 4-fluoro-alpha-(2-methyl-1-oxopropyl-gamma-oxo-N,beta-diphenylbenzenebutanamide occurs in high yield with few side products when it is conducted in a low boiling point ether.

IPC 1-7

**C07C 215/10; C07D 319/06; C07D 405/06; C07F 7/18**

IPC 8 full level

**C07D 319/06** (2006.01); **C07D 405/06** (2006.01); **C07F 7/18** (2006.01)

CPC (source: EP)

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