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Carbazates as potent inhibitors of hormone-sensitive lipase.

AU

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DT

Article

LA

English

ED

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AB

The central role of adipose tissue hormone-sensitive lipase in regulating fatty acid metabolism makes it a potential pharmacological target for the prevention of peripheral insulin resistance in obese, prediabetic and diabetic individuals. The synthesis of a new series of carbazates is presented. Modification of the phenolic 4-position in a series of 1,2,3,4-tetrahydroisoquinoline and morpholine derived carbazates, yielded inhibitors of the catalytic activity of this enzyme with nanomolar potency.

CC

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IT

Major Concepts  
Enzymology (Biochemistry and Molecular Biophysics); Pharmacology

IT

Parts, Structures, & Systems of Organisms  
adipose tissue

IT

Diseases  
diabetes: endocrine disease/pancreas, metabolic disease, drug therapy  
Diabetes Mellitus (MeSH)

IT

Diseases  
obesity: nutritional disease  
Obesity (MeSH)

IT

Chemicals & Biochemicals  
1,2,3,4-tetrahydroisoquinoline; carbazates: enzyme inhibitor-drug;  
fatty acid: metabolism; hormone-sensitive lipase: inhibition; morphine

IT

Miscellaneous Descriptors  
peripheral insulin resistance

**RN**

91-21-4 (1,2,3,4-tetrahydroisoquinoline)  
9001-62-1 (hormone-sensitive lipase)  
57-27-2 (morphine)