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Glucokinase and Glycemic Disease:

From Basics to Novel Therapeutics

The glucose-phosphorylating enzyme glucokinase (also known as hexokinase IV) plays a preeminent role as a glucose sensor and regulatory metabolic enzyme. The implications of this central position of glucokinase for the understanding and treatment of diabetes mellitus are far reaching.

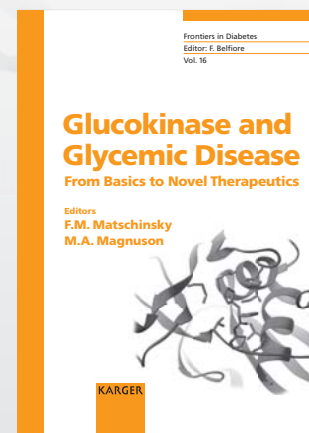
This book addresses the molecular and human genetic, as well as the physiological chemical and pharmacological aspects of the role glucokinase plays in glucose homeostasis and diseases of glucose metabolism, and how the enzyme serves as the drug target for the treatment of diabetes mellitus.

The collection of essays by a team of internationally renowned authors includes basic science chapters dealing with the enzymology, structure and the kinetics of hexokinases, essays describing the biochemical genetics of glucokinase-linked hypo and hyperglycemia syndromes, and papers that discuss the diverse roles of the enzyme in a variety of tissues. Finally, the book contains the latest information on the recently discovered class of weight drugs that activate glucokinase (i.e. glucokinase activators or GKAs).

This volume is of great interest to basic and clinical diabetes researchers, geneticists, biochemists, physiologists and pharmacologists.

Editors:

Franz M. Matschinsky
Mark A. Magnuson



Frontiers in Diabetes, Vol. 16

**Glucokinase and Glycemic Disease:
From Basics to Novel Therapeutics**

Editors: Matschinsky, M. (Philadelphia, Pa.);
Magnuson, M.A. (Nashville, Tenn.)

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*Genetics; Metabolism; Biochemistry;
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Molecular Pathogenesis of MODYs

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