Thesis for the degree of doctor of medicine

Regulation of IL-6-signaling and inflammatory response -role of insulin, FOXO1 and PKC δ

EMELIE WALLERSTEDT



UNIVERSITY OF GOTHENBURG

The Lundberg Laboratory for Diabetes Research Center of Excellence for Cardiovascular and Metabolic Research Department of Molecular and Clinical Medicine/Diabetes The Sahlgrenska Academy at University of Gothenburg

Regulation of IL-6-signaling and inflammatory response -role of insulin, FOXO1 and PKCδ

EMELIE WALLERSTEDT

ISBN 978-91-628-8040-8

© 2010 Emelie Wallerstedt

Printed by Intellecta Infolog AB, Gothenburg, Sweden

Previously published papers were produced with the permission from the publishers: **Paper I**: This article is reprinted from Andersson CX, Sopasakis VR, Wallerstedt E, Smith U. *Insulin antagonizes interleukin-6 signaling and is anti-inflammatory in 3T3-L1 adipocytes*. J Biol Chem. 2007 Mar 30;282(13):9430-5. © 2010 by American Society for Biochemistry and Molecular Biology. **Paper II**: This article is reprinted from Wallerstedt E, Smith U, Andersson CX. *Protein kinase C-\delta is involved in the inflammatory effect of IL-6 in mouse adipose cells*. Diabetologia. 2010 Feb 12. [Epub ahead of print]. © 2010 Copyright Clearance Center, Inc. All Rights Reserved.

Till Pappa



The picture was drawn by Renata Alvadia, Rio de Janeiro, Brazil, 2008.