



The PI molecule includes inositol 1-phosphate (a hydrophilic portion exposed to the cytosol), bound *via* the phosphate group to 1-R1, 2-R2 diacylglycerol (a hydrophobic membrane-anchored portion). Depicted are the major pathways for synthesis and turnover confirmed both *in vitro* and *in vivo* (solid arrows). The routes implicated in insulin-regulated GLUT4 vesicle translocation discussed herein are in turquoise arrows. R1/R2, fatty acid; P, phosphate.