INSULIN SIGNALING PATHWAY Glucose homeostasis translocation to PM K06086 K04438 K07192 K07194 GLUT4 vesicle → Glucose uptake — K04707 K06277 K07193 Glucose +p +p K15909 Lipogenesis — SKIP Fatty acid biosynthesis (path 1) K12406 K04694... K00844... K07202 🗕 Glycolysis 🖖 K05696 Glycolysis / Glucone ogenesis K03841 K07201 K04440 K01596 DNA -py/__4ps Glycogen +ру К16172... K04526 K06276 K00693 ಾ → Glycogenesis — PIP₃ Zpyl Starch and sucrose metabolism Phosphatidyl inositol signaling system K07206 +p` ► Antilipolysis —— +ps : serine phosphorylation +py : tyrosine phosphorylation -py : tyrosine dephosphorylation cAMP K02158 Antiapoptosis Lipid homeostasis Apoptosis MAPK signaling pathway K07204 Protein synthesis +p K04372 K02833.. Proliferation, differentiation K04375 DNA 04910 8/14/15 (c) Kanehisa Laboratories