PROGESTERONE-MEDIATED OOCYTE MATURATION Xenopusoocyte K08556 K08694 K02206 K06627 MAPK signaling pathway Cell cycle Eg2 K02602 Progesterone Translation of maternal mRNAs GPCR? GVBD and meiosis I MPF +p' K05868 K04079 K02087 G2 arrest, -p_ cAMP Plkk1 K05866... K08041.. Meiosis II entry and S phase omission K02178 K13296 +p Cdc2 K04526 ► PI3K K02537.. CycB1B4 PIP3, PIP2 K05459 → Metaphase II arrest Xkid K04365.. 04914 5/13/10 (c) Kanehisa Laboratories