LONGEVITY REGULATING PATHWAY - MAMIMAL +p Stress resistance Stem cell self-renewal Insulin signaling pathway cAMP Hematopoietic regeneration **+**p K16172... K04526 ROS detoxification +p K05459 PIP3 DNA K02833... Autophagy PI3K-Akt signaling pathway FOXO signaling pathway Regulation of autophagy +р, - Autophagy Rapamycin K17589 K19730 Longevity K07206 Reduction in the rate of protein synthesis 77.14 mTOR signaling pathway Dietary restriction Metformin_ Nutrients ଂ**ଠ**:_ K02159 Reduction in pro-apoptotic effect p53 Signaling pathway NAD+ Reduction in pro-inflammatory effect K07296 K08733 Ca2+ NF-xB Signaling pathway AMPK signaling pathway Reduction in __white addipose tissue Energy depletion Mitochondrial biogenesis Oxidative metabolism DNA Deacetylated Type I myofibres Genotoxic. K04451 K10141 K07202 DNA Resveratrol 04211 12/14/15 (c) Kanehisa Laboratories