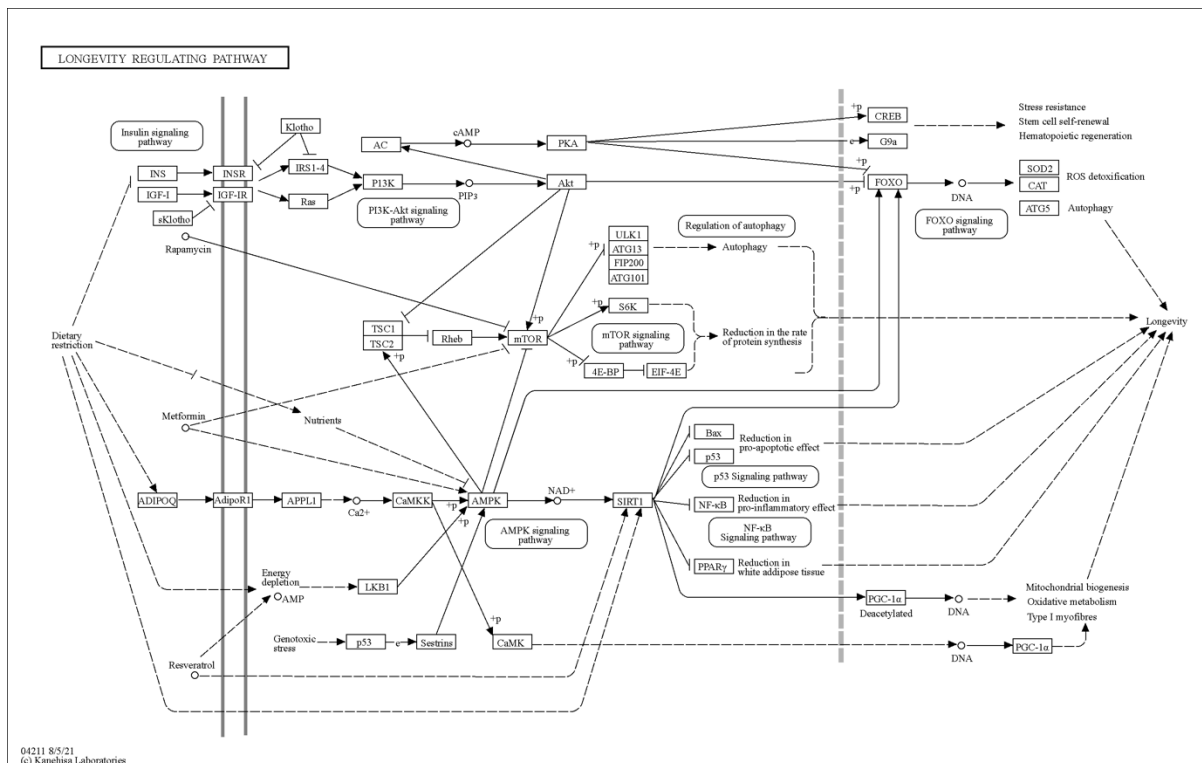


Supplement

Agraharam, G., Girigoswami, A., Gowtham, P., & Girigoswami, K. (2023). Genes involved in premature aging and their association with age-related diseases: A mini review. *Biomedical Research and Therapy*, 10(7), 5783-5795. <https://doi.org/10.15419/bmrat.v10i7.819>

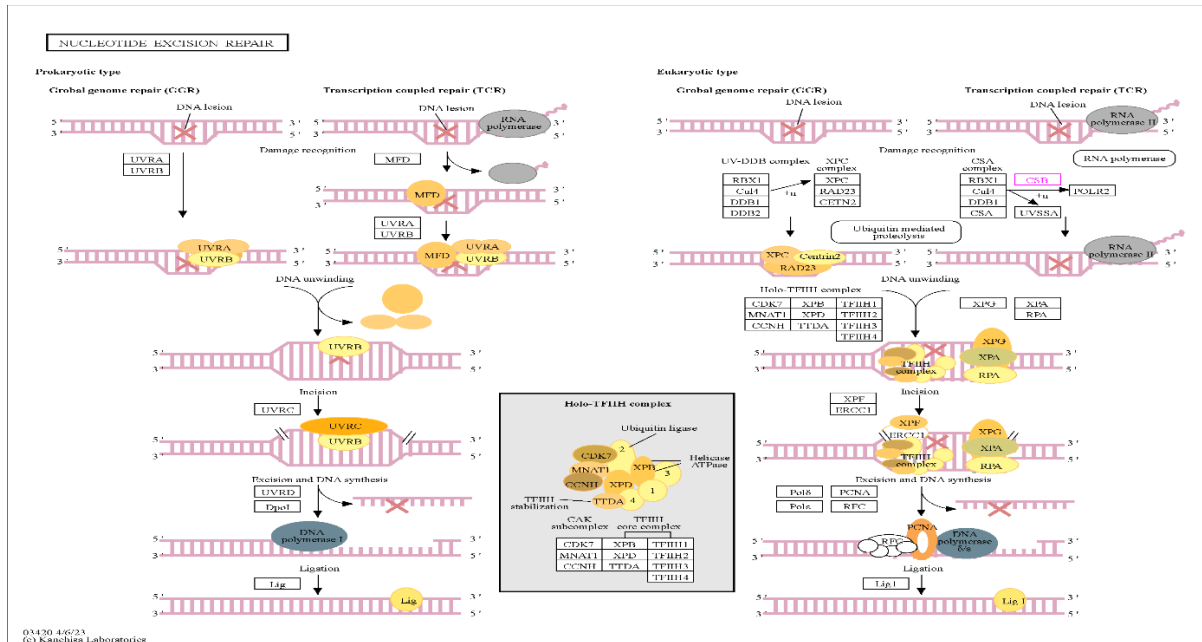
The results obtained from KEGG database for the different ageing or ageing related disease pathway for these genes are given below:

Klotho:



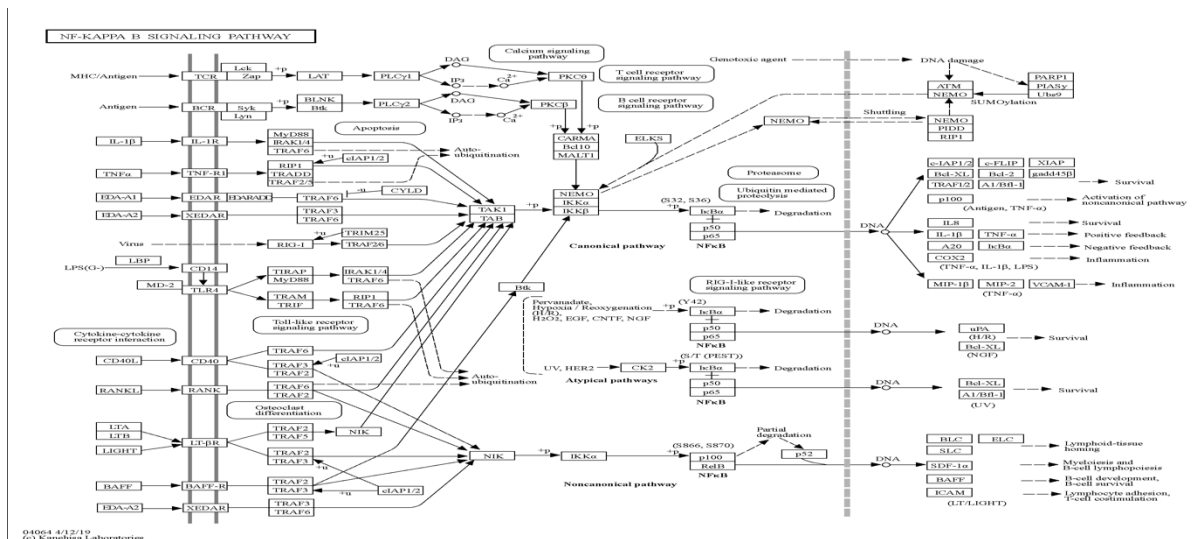
Werner syndrome gene (WRN):

Excision repair cross-complementation group 6 (ERCC6):

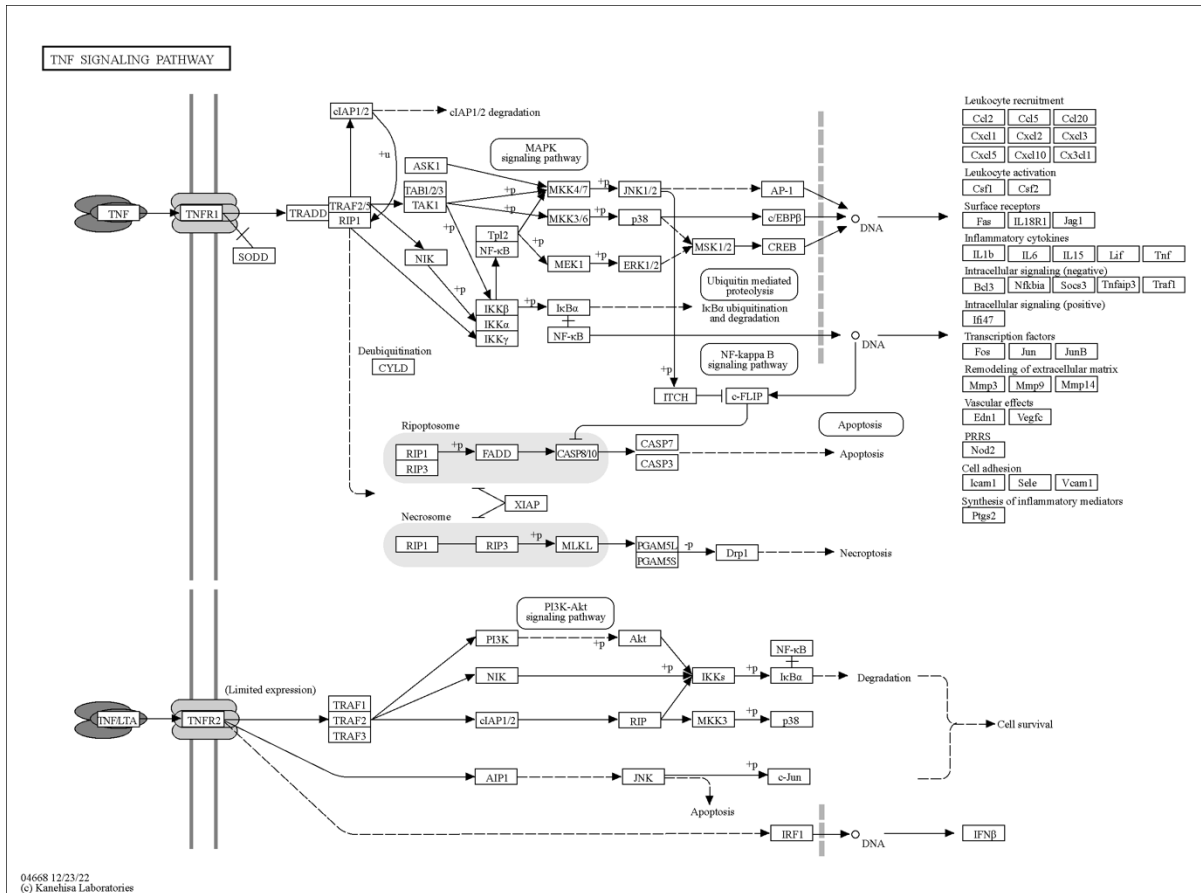


Amyloid-beta precursor protein (APP):

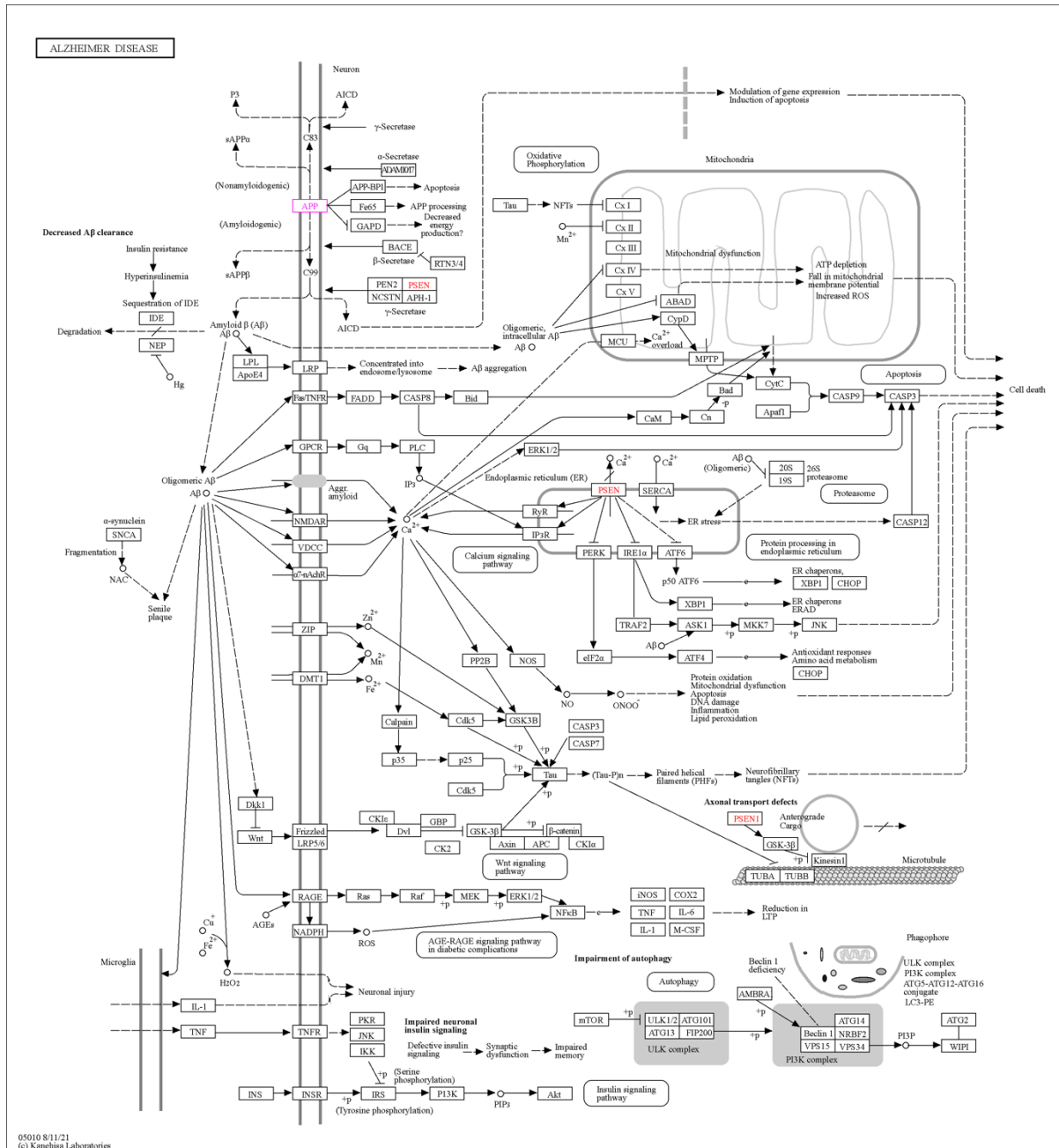
Nfkb pathway:



Tnf pathway:

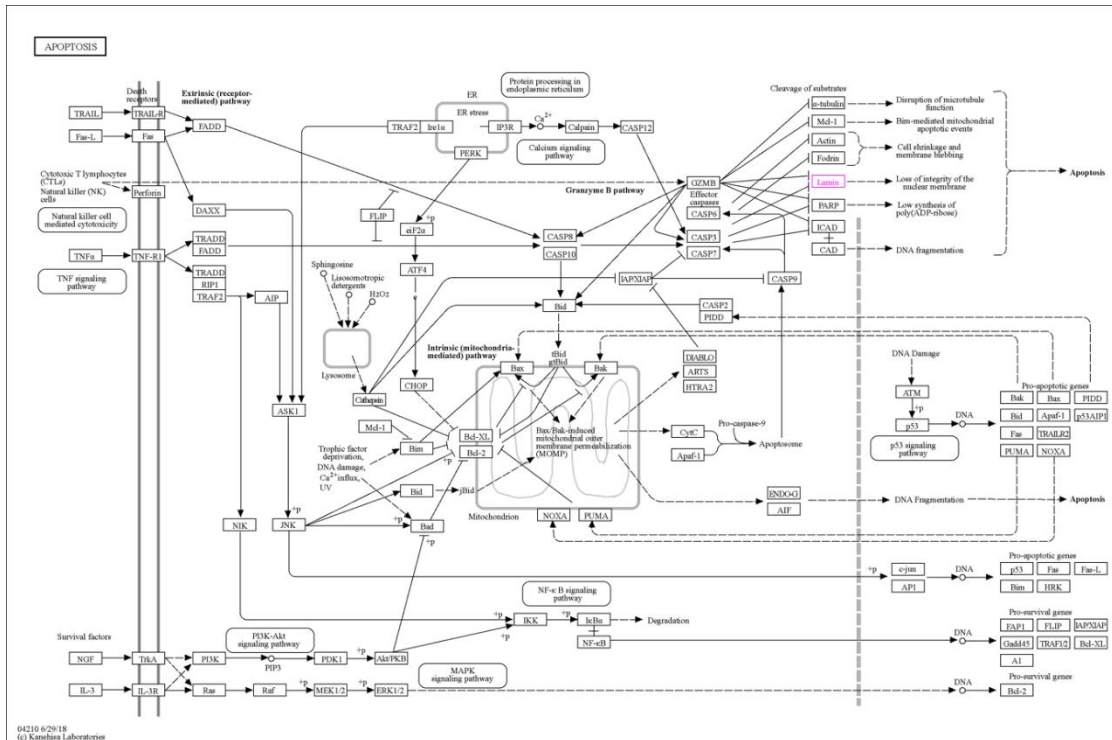


Alzheimers disease:

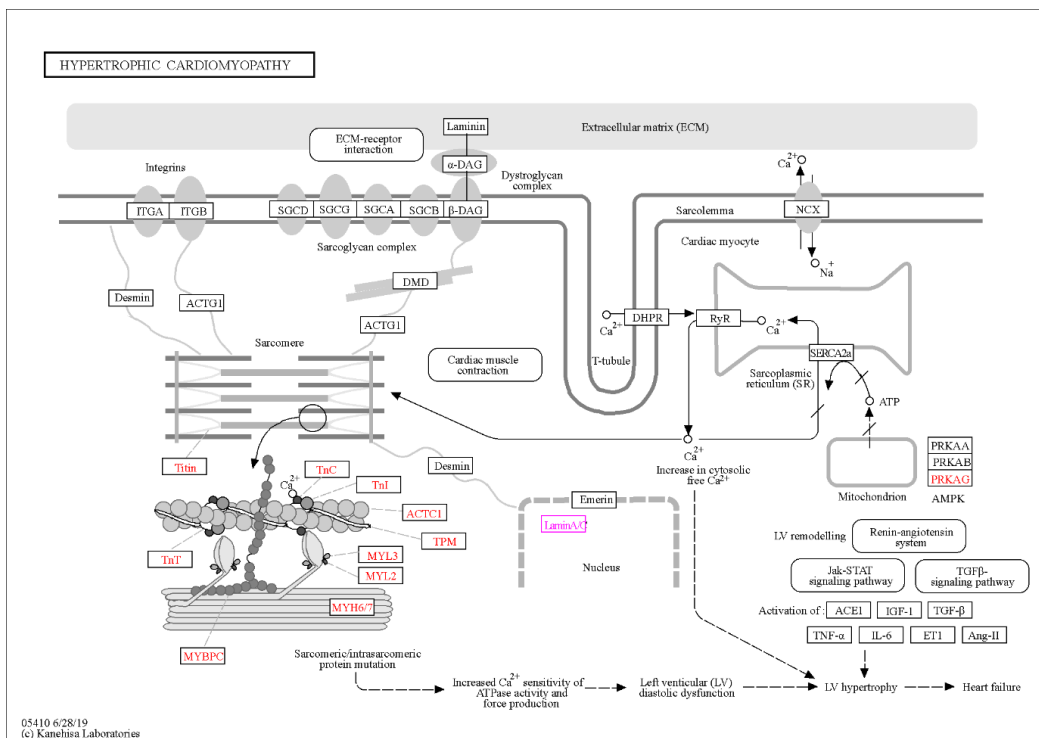


Lamin A (LMNA):

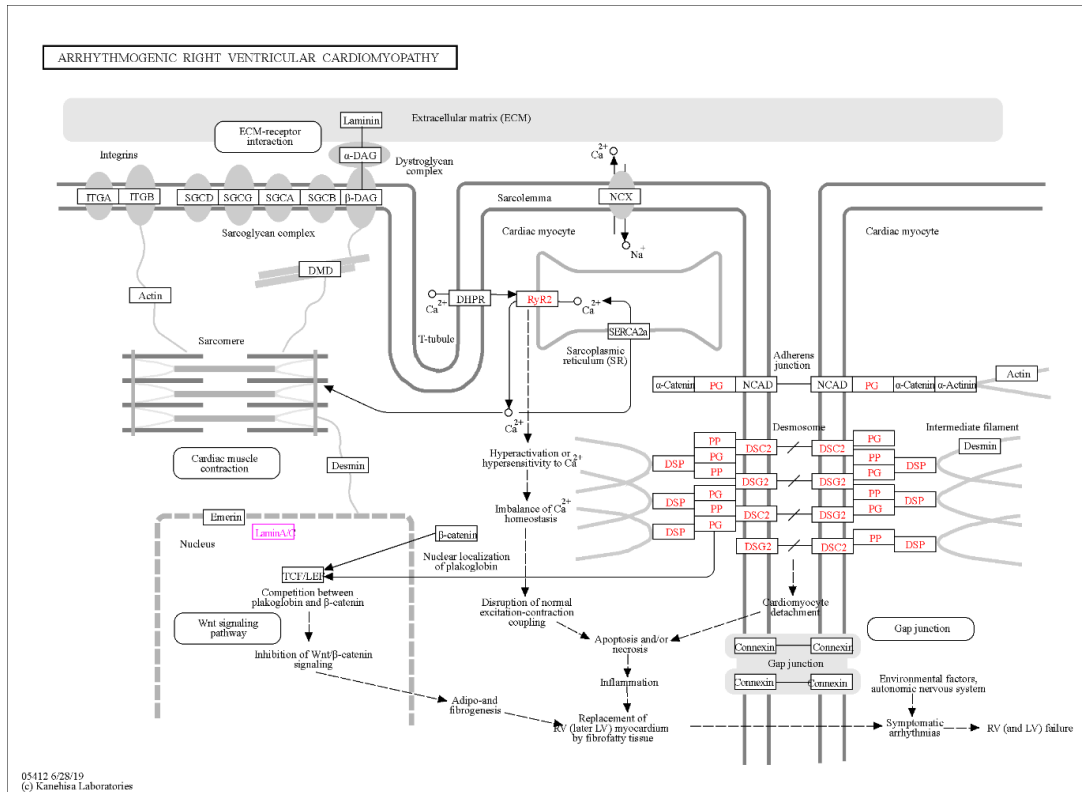
Apoptosis:



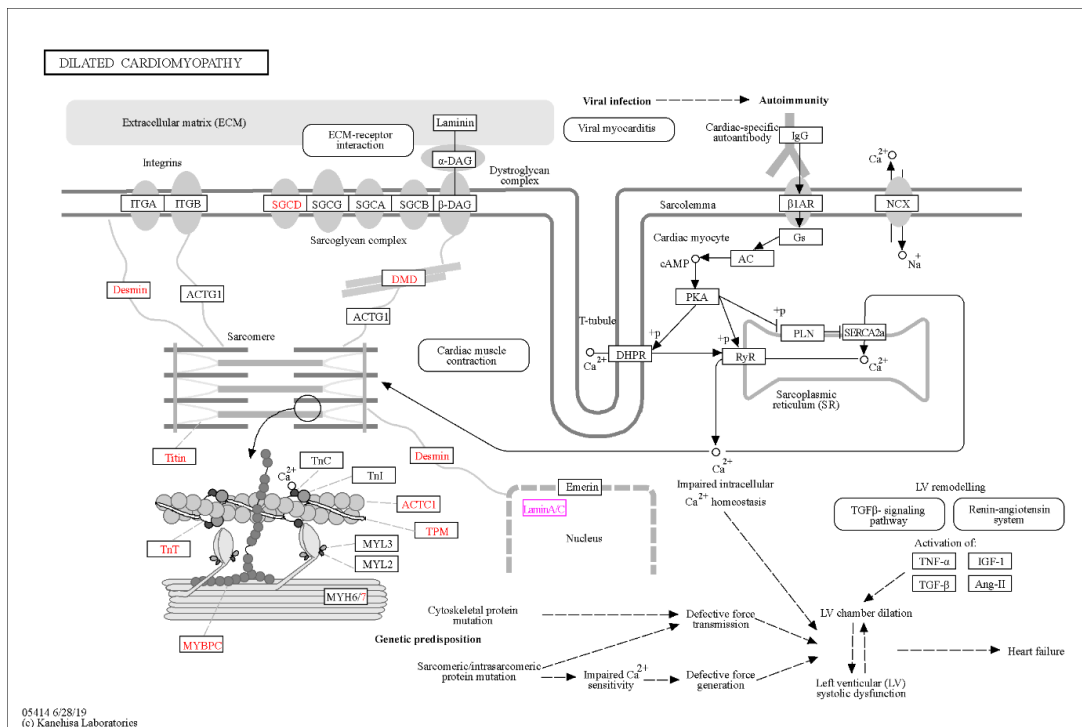
Hypertrophic cardiomyopathy:



Arrhythmogenic right ventricular cardiomyopathy

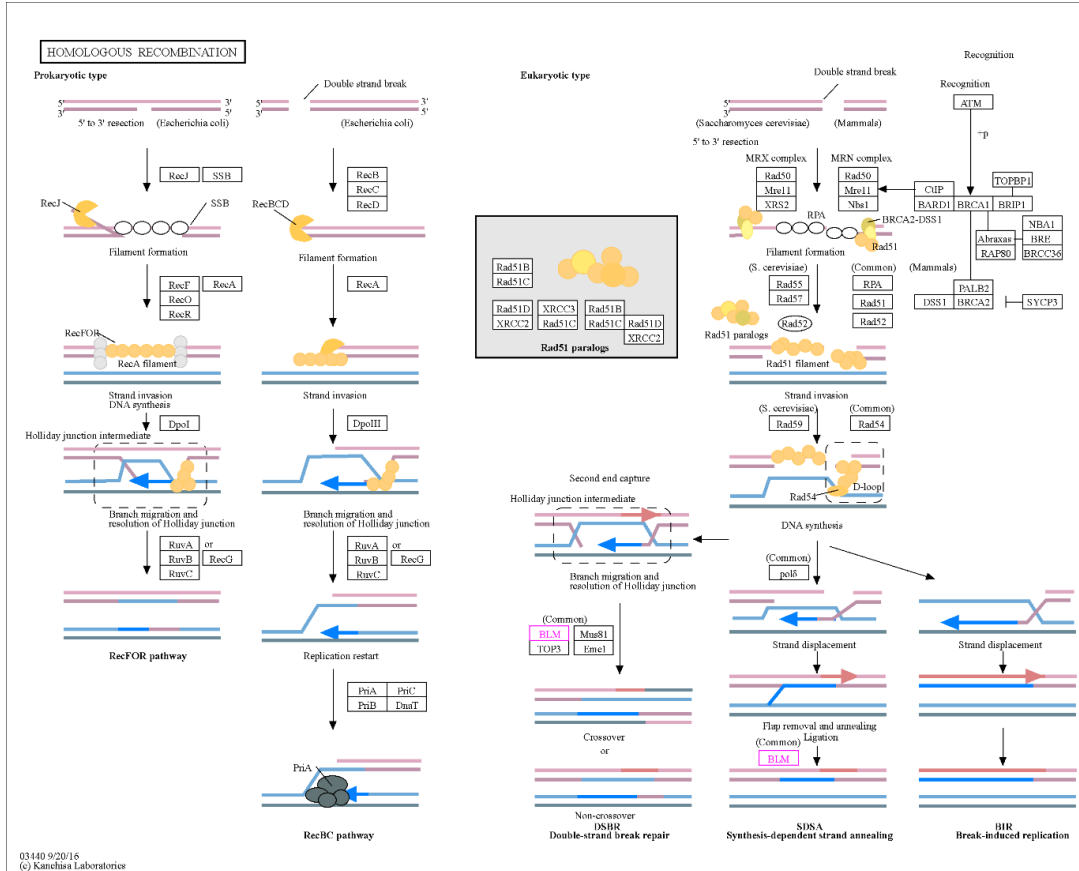


Dilated cardiomyopathy



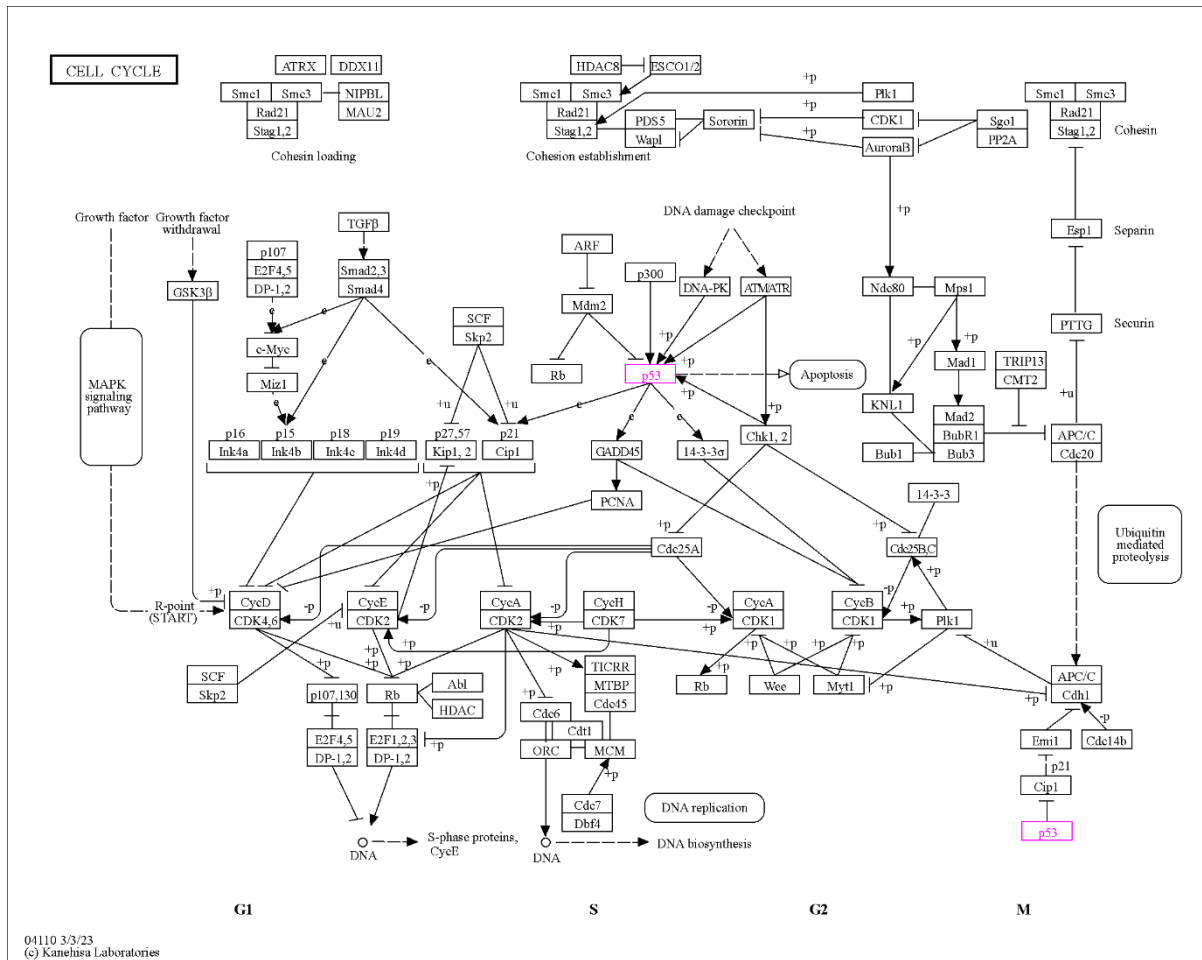
RecQ like helicase 3 (*RECQL3/ BLM*):

Homologous recombination:

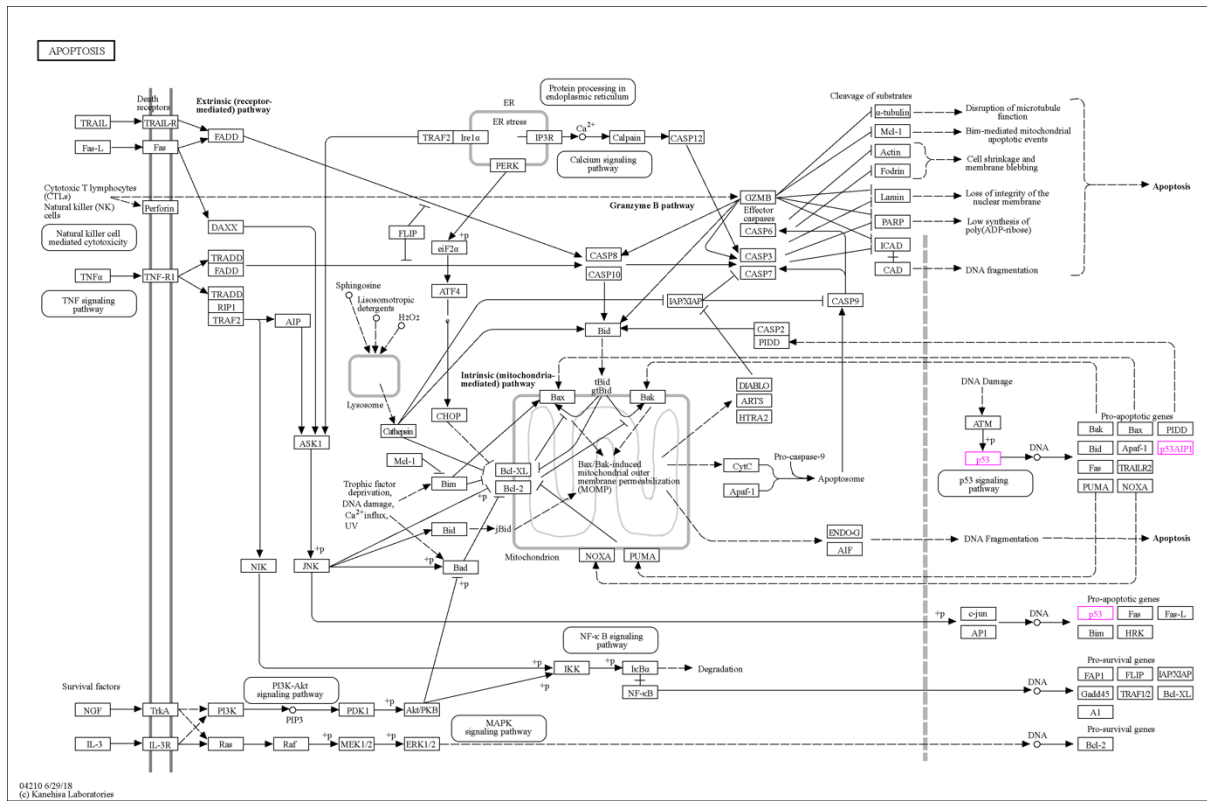


RecQ like helicase 4 (*RECQL4*):

Tumor protein p53 (*TP53*): Cellular senescence ([map04218](#)):

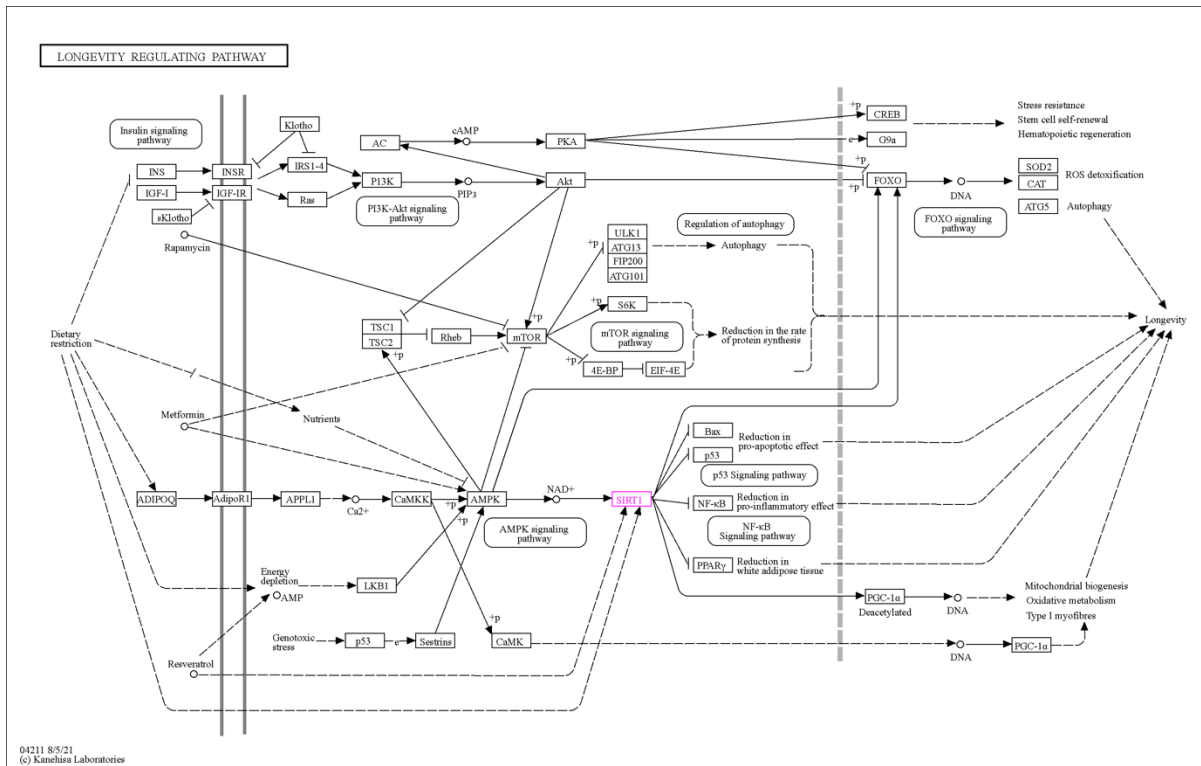


Apoptosis ([map04210](#)):

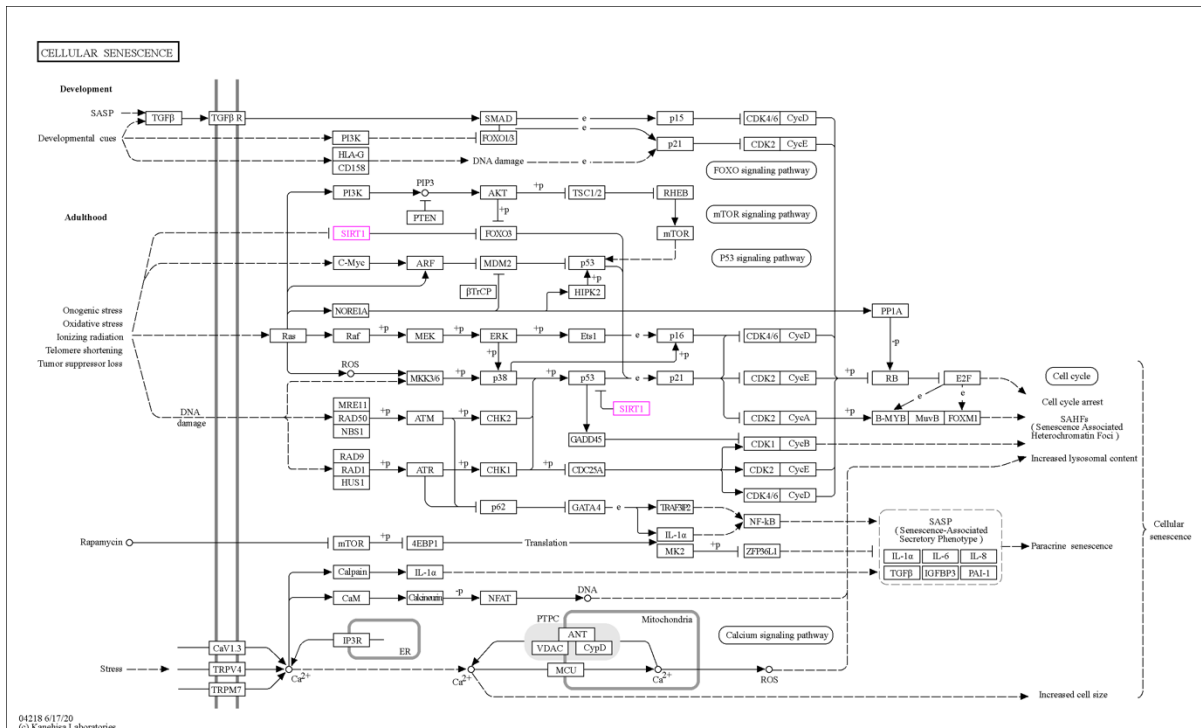


Sirtuin 1 (*SIRT1*):

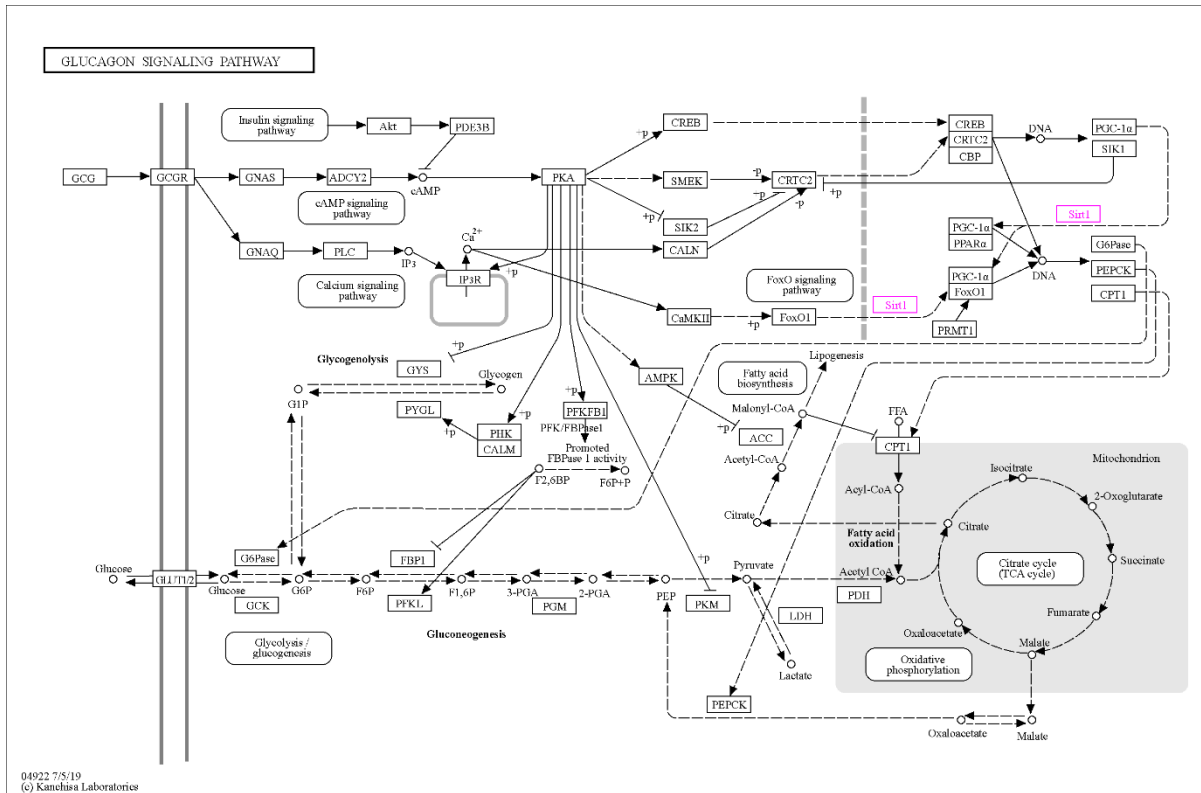
Longevity regulating pathway ([map04211](#)),



Cellular senescence ([map04218](#)),



Glucagon signaling pathway ([map04922](#)),



Metabolic pathway ([map01100](#))