**Input**

DNAdamage

LowNutrition

IGF1

**logic**

**AR = (RB1 | HSPB1) & !RELA**

**CHEK1 = DNAdamage**

**HSPB1 = !RPS6KB1 & AR**

**IKBKB = (PRKCQ & !HSPB1) | NFKB1**

**IL2 = JUN & NFKB1**

**IRS1 = IGF1 & !(PRKCQ | RPS6KB1 | IKBKB)**

**JUN = RB1 | NFKB1 | RELA | AR**

**NFKB1 = RELA & IKBKB & !CHEK1**

**PRKCQ = DNAdamage**

**RB1 = CHEK1**

**RELA = IKBKB | NFKB1**

**RPS6KB1 = !LowNutrition & IRS1**