The diagram illustrates various signaling pathways and their interactions, including:

- **Rho** and **Rac** signaling pathways
- **CDK** and **CK1** pathways
- **PI3K** and **PDK1** pathways
- **AKT** and **PTEN** regulation
- **MEK1/2** and **ERK** pathways
- **Ras** and **Raf** interactions
- **NF-κB** and **IkappaB** signaling
- **DNA repair** and cell cycle progression
- **Toll-like receptor** and **IL-1β** signaling pathways
- **Cytokine signaling** pathways

The diagram also highlights proteins and their functions, such as **c-Myc**, **BCL2**, and **DNA polymerase**.