EPSTEIN-BARR VIRUS INFECTION Viral gene transcription B cell RNA transport K19454 K04012 mRNA Virus episome K19451... HLA-DR Infection K19453 Epstein-Barr virus HLA-DP HLA-DQ EBNA2/3A/3B/3C/LP, LMP K19456 Cytosolic antigen Antigen processing and presentation Proteasome HLA-DR Basal transcription factors Cytotoxic T cell K01242 K06751 K19457 K19459 K06477 ER K19458 K19460 K04012 K13784 K19461 K06053 DNA Killing of target cells Infectious mononucleosis p53 signaling pathway Chronic active EBV infection DNA **DNA** Hemophagocytic lymphohistidiocystosis +uT K19462 K19458 Burkitt lymphoma Nasopharyngeal carcinoma Hodgkin lymphoma Cell cycle <u>+</u>u Transformation — 🖚 Post-transplant lymphoproliferative disorder (Ubiquitin-mediated proteolysis Regulation of actin cytoskeleton Anchorage-independent growth K03160 K19459 K03171 K06256 K05718 K06492 K11218 K06490 K07606 Inhibited apoptosis K11859 (MAPK signaling pathway) LMP2A Apoptosis LMP2B Calcium signaling pathway K06856 **+**p B cell receptor signaling pathway O---IP3 K06465 +p K04687 RIG-I-like receptor signaling pathway K05443 DNA EBER small RNAs Inhibited apoptosis K05134... K11217... K04692 Jak-STAT signaling pathway 05169 7/14/15 (c) Kanehisa Laboratories