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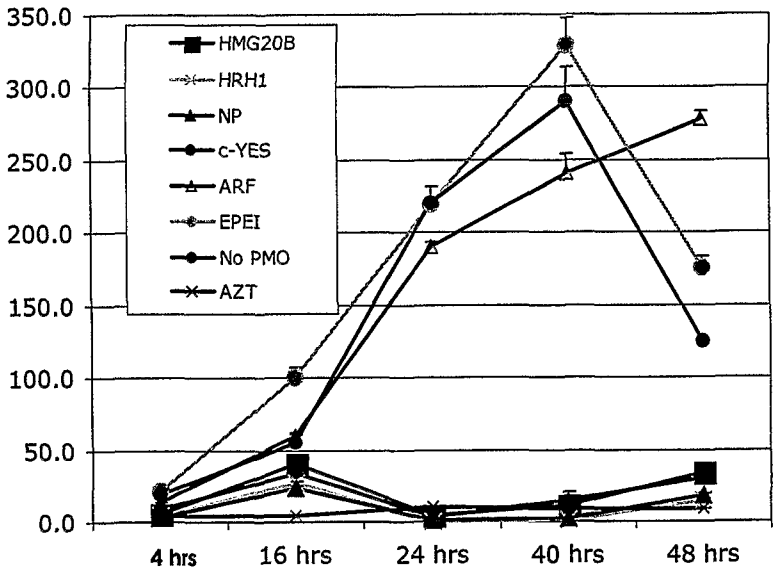
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[Continued on next page]

(54) Title: METHODS OF TREATMENT AND DISGNOSIS USING MODULATORS OF VIRUS-INDUCED CELLULAR GENE SEQUENCES



(57) Abstract: Applicants have used microarrays, gene expression profiling, and gene silencing methods to identify and provide a plurality of 'validated' virus-induced cellular gene sequences (e.g., HMG20B, HRH1, NP and c-YES (src family kinases)) and pathways useful as therapeutic targets for modulation of viral-mediated cellular effects. Particular embodiments provide therapeutic compositions, and methods for modulation of viral infection, replication, maturation, progression, or other virally-related conditions or diseases, comprising inhibition of virally-induced gene sequences and gene products. Additional embodiments provide screening assays for compounds useful to modulate viral infection, replication, maturation or progression, or viral-related conditions or diseases. Further embodiments provide diagnostic and/or prognostic assays for viral infection, replication, maturation or progression. Preferably, the viruses all selected from the group consisting of retroviruses (e.g., human immunodeficiency virus (HIV), and viruses of the family Flaviviridae that includes the flaviviruses (e.g., West Nile virus (WNV), Japanese encephalitis virus (JEV), yellow fever virus (YFV) and Dengue fever virus (DEN)), and hepatitis C virus (HCV).

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