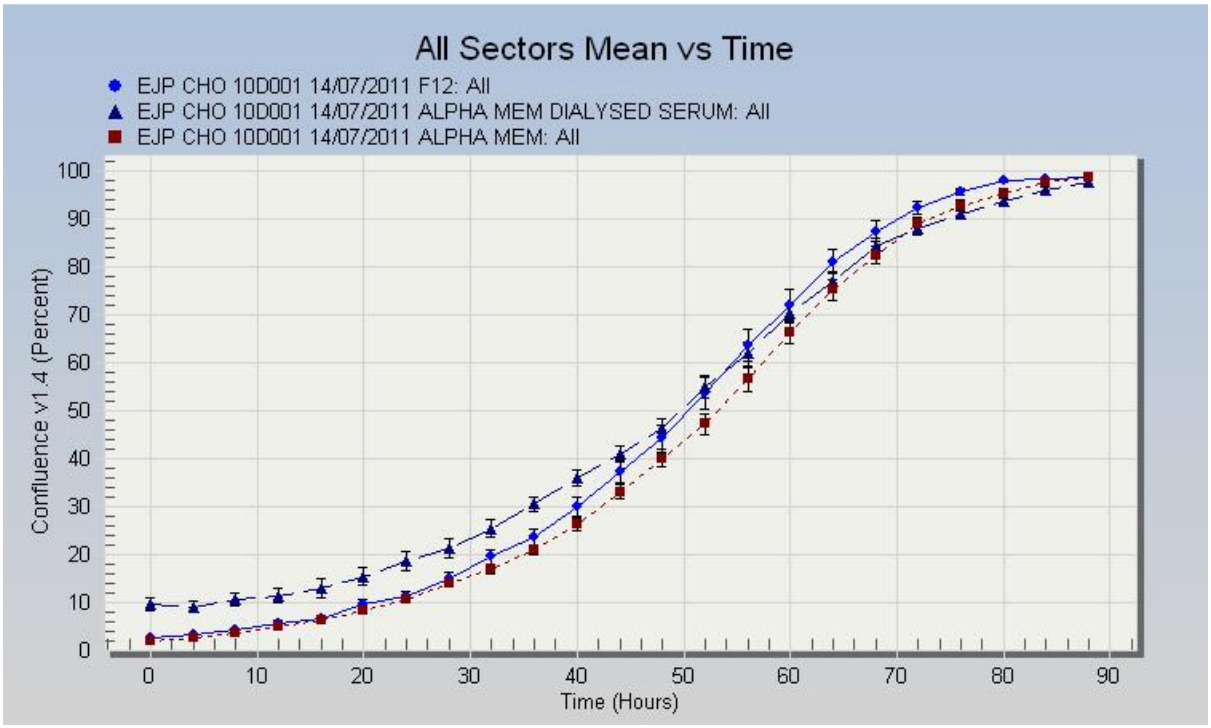
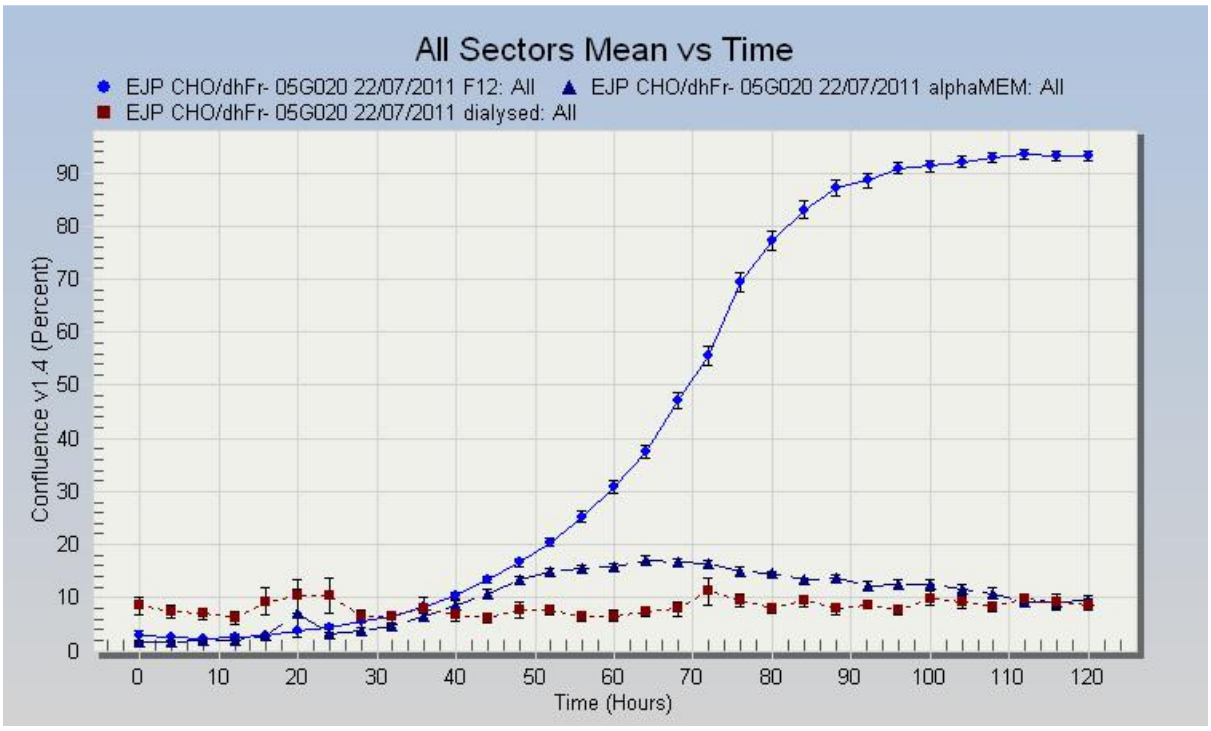
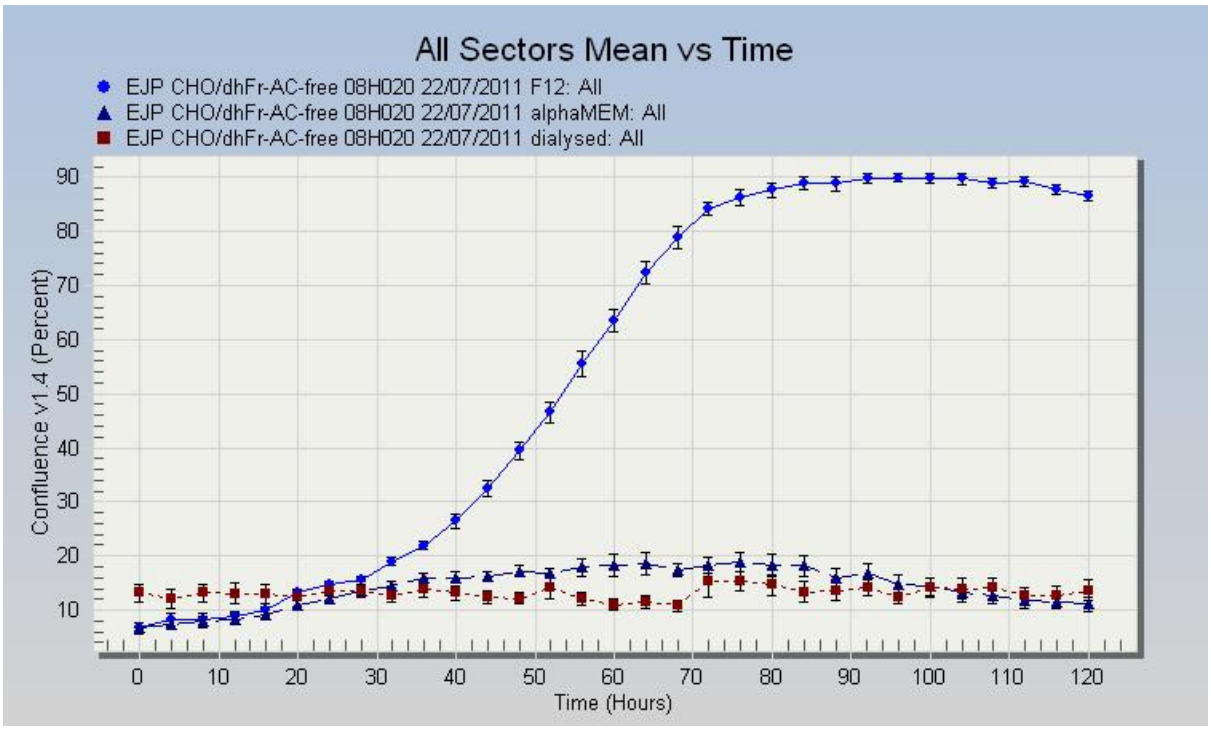
CHO/dhFr- & CHO/dhFr-AC-free data sheet

The CHO/dhFr- cell line lacks the enzyme dihydrofolate reductase (DHFR) which is necessary for purine synthesis. In the absence of exogenous purines, this enzyme is required for growth. Hence the CHO/dhFr- cell line has growth requirements for hypoxanthine (or adenine), glycine and thymidine. However, the cells will continue to grow without the addition of hypoxanthine and thymidine because the cells can obtain sufficient from the medium. Alpha MEM minus does not contain the ribonucleosides or the deoxyribonucleosides, and will not support the growth of CHO/dhFr- or its serum free adaptation as neither contains the gene to produce DHFR. This has been confirmed by comparing the growth of the cells lacking DHFR in Hams F12 and in Alpha MEM minus containing 10%FCS (both normal and dialysed to remove purines that might be present). CHO (85050302) was used as a positive control. Growth profiles were obtained for each cell line. The results confirm that both CHO/dhFr- and the serum free counterpart lack the dihydrofolate reductase enzyme. CHO cells grew equally well in the three different media indicating the presence of the dihydrofolate reductase enzyme.



Health Protection Agency Culture Collections, Centre for Emergency Preparedness and Response, Porton Down, Salisbury, SP4 0JG, United Kingdom
T +44 (0) 1980 612512 F +44 (0) 1980 611315 E hpacultures@hpa.org.uk W www.hpacultures.org.uk





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