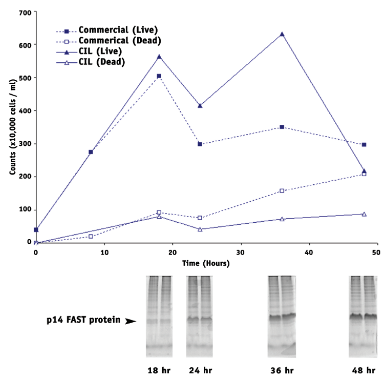
BioExpress® 2000 Insect Cell Media

Results from CIL

Infected Cell Growth

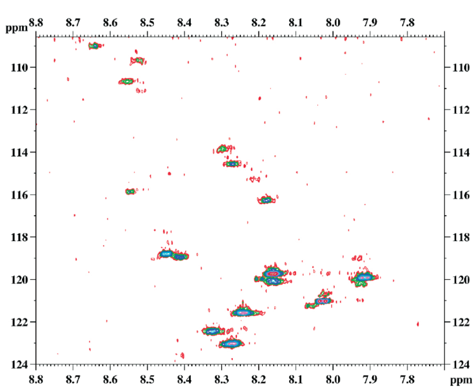
Commercial Media vs. CIL's BioExpress® 2000 (unlabeled)



SF-21 cells were grown in standard SF9 media to optimum cell density, spun down and resuspended in baculovirus, then topped off with standard SF9 media. The cells were incubated for one hour, spun down again and excess supernatant removed. The cells were then resuspended in 500 mL of CIL's BioExpress® 2000 either unlabeled, selectively labeled with ^{15}N Val, ^{15}N Leu and ^{15}N Ser or uniformly labeled with ^{15}N and grown over 48 hours. There was less-than-usual cell death as compared to commercial SP9 media and a higher efficiency of infection.

^{1}H-^{15}N HSQC of P14 FAST Protein

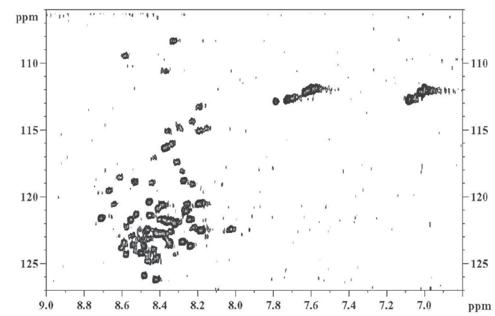
Labeled with ^{15}N Val, ^{15}N Ser and ^{15}N Leu
Using CIL's BioExpress® 2000



90% H_2O/10% D_2O; ph7; 500 mM octyl glucoside; 50 mM HEPES; 300 mM NaCl.

^{1}H-^{15}N HSQC of P14 FAST Protein (U-^{15}N)

Produced from CIL's BioExpress® 2000 Insect Cell Media



90% H_2O/10% D_2O; 318 K; pH 5.5 in octyl glucoside.

^{15}N-Labeled P14 FAST Protein Expression

CIL's BioExpress® 2000 (^{15}N Val, ^{15}N Ser and ^{15}N Leu)
~16 mg/500 mL Media

The cells were spun down and the pellet frozen at -70ºC. The protein was purified using a standard protein-purification protocol, first by Ni+2 talon resin followed by ion exchange chromatography. Total p14 protein was calculated to be 16.3 mg from a 500 mL preparation as measured by a Lowry assay using BSA as standards.

Results obtained by: Dr. David L. Jakeman and Dr. Ray T. Syvitski, College of Pharmacy, and Dr. R. Duncan and Mr. Deniz Top, Department of Microbiology, Dalhousie University, Nova Scotia, Canada.