assays of DEAE chromatographic fractions of cell-free extracts. The specificity of TF2 for the 5′ C box was tested by competition analysis using six other oligonucleotides. Purification of TF2 was achieved by ion-exchange chromatography, DNA affinity chromatography, gel filtration chromatography, and preparative SDS-PAGE. SDS-PAGE analysis indicated an apparent subunit molecular weight of 28 kDa. The apparent molecular weight of the native protein as estimated by gel filtration was about 53 kDa. This suggested that TF2 binds *gp2* as a homodimer. A cDNA clone of the *tf2* gene was provided by the Japanese *Dictyostelium* cDNA project. This allowed me to synthesize probes for Southern and Northern blot analyses. Southern blot analysis indicated that there is only one form of the *tf2* gene. Northern analysis showed little or no expression of *tf2* in undifferentiated cells. During development *tf2* expression increases up to a maximum at 8 h, then decreases in later stages. Attempts to disrupt the gene suggest that *tf2* mutation may be lethal.

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