

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.

## **Acknowledgements**

I would like to thank the Biology department and the graduate school of Virginia Tech for giving me an excellent opportunity to pursue my doctoral work. A graduate education in the United States would have been impossible without financial support and therefore I am grateful for the teaching assistantships from the Biology department.

I am especially grateful to Dr. Charles L. Rutherford for accepting me into his research team. He has been both a friend and mentor. Dr. Rutherford has shown me by example what it takes to be an outstanding scientist.

I am thankful to my graduate committee members Dr. Joseph O. Falkinham III, Dr. Elizabeth Grabau, Dr. Richard Walker and Dr. Eric Wong for their valuable suggestions and encouragement.

I would like to thank Dr. Ian McCaffery for training me in lab techniques and supervising my research in the early years. Thanks to Dr. Reyna Favis for helpful discussions and tips.

Life in the lab would not have been as much fun without my past and present colleagues – Ms. Wen Wu, Dr. Brian Williamson, Ms. Xiao Wen, Ms. Katie Snyder, Ms. Danielle Overall, Ms. Pawjai Khampang, Mr. Jeremy Goodin, Mr. Can Eristi, Ms. Laura Douglas, Mr. Bekir Col, Dr. Chanpen Chanchao and Ms. Elizabeth Brittle.

I would like to acknowledge Mrs. Mary Schaeffer, Mrs. Cathy Light and Mrs. Judy Alls for their technical assistance with the Biology labs.

I am thankful to my parents Madhav and Madhuri Warty for their love and encouragement to pursue my goals. I am grateful to my sister Ujwala and brother-in-law Michael for all their help and support during my years here.

And finally a very special thanks to my husband Rob Warner. Rob has had to put up with the worst aspects of graduate school. He has given me endless rides home after hours and helped me on midnight “poster glueing” projects ; ) to name just a few things. I would like to thank him for being so supportive and understanding.

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