The regulation of gene expression is achieved at many levels. Chromatin-based gene regulation has been the central focus of many decades of research; however, posttranscriptional control mechanisms are emerging as a fundamental complement to direct protein synthesis. This thesis is focused on a specific mechanism of posttranscriptional control - the translational regulation of mRNAs in the cell cytoplasm. This control is a consequence of the balance between translational repression and activation and hinges on the selective recognition of regulated mRNAs by RNA-binding proteins and their ability to recruit RNA modifying proteins. In this thesis, Caenorhabditis elegans germline was used to study translational control of the germ cell-enriched gene, gld-2. Mutants of known RNA-binding proteins of the PUF and CPB protein families were analyzed by performing Western blots, using anti-GLD-2 antibodies. Yeast 3-Hybrid system was used to identify the cis-regulatory sites in the gld-2 mRNA conferring translational regulation by members of PUF and CPB protein families. Potential autoregulatory loop of gld-2 gene expression was also investigated. This thesis shows that FBF proteins positively regulate expression of gld-2 and bind to a conserved sequence in the 3´UTR of its mRNA. Mutations of gld-2 negatively affect protein levels of GLD-2, suggesting the presence of autoregulatory loop. However, this effect was not that strong, probably because of redundant effect of other cytoplasmic poly(A) polymerase GLD-4.