**Yeast ORFan Gene Project: Module 5 Worksheet**

**Cellular Localization Data**

**Transmembrane Helices Hidden Markov Models (TMHMM)**

**TMHMM Graphic:**

**TMHMM Number of Predicted Transmembrane Helices:**

**TMHMM Amino Acid Sequence Ranges Covered by TMHMM:**

**SignalP**

**HMM SignalP graph:**

**Signal Peptide Probabilities:**

**Do these probabilities meet the cutoff?**

**PSORT II**

***Signal Sequence***

**PSG -**

**GvH -**

**INTERPRETATION:**

***Transmembrane Segments***

**ALOM -**

**INTERPRETATION:**

***Mitochondrial Proteins***

**MITDISC -**

**Gavel -**

**INTERPRETATION:**

***Nuclear Proteins***

**NUCDISC -**

**INTERPRETATION:**

***Endoplasmic Reticulum Proteins***

**KDEL -**

**ER Membrane Retention Signals –**

**INTERPRETATION:**

***Peroxisomal Proteins***

**SKL –**

**SKL2 -**

**INTERPRETATION:**

***Vacuolar Proteins***

**VAC-**

**INTERPRETATION:**

***Lipid Anchors***

**NMYR-**

**Prenylation motif-**

**INTERPRETATION:**

***Miscellaneous Motifs***

**RNA-binding motif-**

**Actinin-type actin-binding motif-**

**memYORL-**

**Tyrosines in the tail –**

**Dileucine motif in the tail –**

**DNA binding motifs-**

**Ribosomal protein motifs-**

**NNCN -**

**INTERPRETATION:**

***Coiled-coil Structure***

**COIL-**

**INTERPRETATION:**

**OVERALL PSORT II Summary and INTERPRETATION:**

**Phobius**

**Phobius Graph:**

**Probability Data:**

**HYPOTHESIS OF CELLULAR LOCALIZATION**

**Hypothesis:**