

# 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**  
-

**INTERPRETATIO  
N:**

*Transmembrane Segments*

**ALOM**  
-

**INTERPRETATIO  
N:**

*Mitochondrial Proteins*

**MITDISC**  
-

**Gavel -**

**INTERPRETATIO**

**N:**

*Nuclear Proteins*

**NUCDISC**

-

**INTERPRETATIO**

**N:**

*Endoplasmic Reticulum Proteins*

**KDEL**

-

**ER Membrane Retention Signals –**

**INTERPRETATIO**

**N:**

*Peroxisomal Proteins*

**SKL**

-

**SKL2**

-

## INTERPRETATIO

N:

### *Vacuolar Proteins*

VAC

-

## INTERPRETATIO

N:

### *Lipid Anchors*

NMYR

-

**Prenylation motif-**

## INTERPRETATIO

N:

### *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**

-

**INTERPRETATIO**

**N:**

*Coiled-coil Structure*

**COI**

**L-**

**INTERPRETATIO**

**N:**

**OVERALL PSORT II Summary and**

## **INTERPRETATION:**

**Phobius**

**Phobius Graph:**

**Probability Data:**

## **HYPOTHESIS OF CELLULAR LOCALIZATION**

**Hypothesis:**