

Supplemental Tables

Table S1 Biosynthetic demands for proteins with unknown functions by predicted subcellular localization

	Genes (n)	Mean length (aa)	Nascent chains ^a (%)	Ribosomes ^b (%)
Cotranslationally Translocated^c				
Endoplasmic reticulum	113	446	7.0%	19.0%
Cell membrane	56	494	6.0%	15.0%
Lysosome/Vacuole	30	482	2.0%	7.0%
Posttranslationally Translocated^d				
Extracellular	13	246	79.0%	44.0%
Cell membrane	9	267	2.0%	3.0%
Endoplasmic reticulum	7	453	0.0%	1.0%

^aCalculated as percent of total cTPM for all proteins predicted to be ER destined.

^bCalculated as percent of total cRPM for all proteins predicted to be ER destined.

^cProteins with greater than 2-fold membrane enrichment and not predicted to be mitochondrial.

^dProteins with less than 2-fold membrane enrichment and not predicted to be mitochondrial and contained a predicted signal sequence.