



**Figure 1. Transmembrane protein tyopology.** Proteins c an be arranged with varioud orienta-  
tions in the plasma membrane. Both N-terminus and the C-terminus can be either inside or  
outside the cell. Proteins can be single pass, meaning that they contain a single transmembrane  
segment and pass the membrane once, or multipass, meaning that they contain multiple trans-  
membrane sequences and span the membrane more than one time. Single Pass proteins may  
further be characterized as Type 1 proteins or Type II proteins based on their orientation in the  
membrane. In this figure, the multipass proteins were drawn with 3,4 or 5 transmembrane  
segments, but within cells, mutipass proteins may span the membrane various numbers of times.  
In the cell lines used in this experiment, the N terminal end is tagged with the 6xHis epitope (blue)  
and the C terminal end is tagged with the FLAG epitope (orange).