**StarCellBio – Experiment 1**

Protein localization

**EXPERIMENT SET-UP**

*Strains*:

* GFP-Protein A
* GFP-Protein B
* GFP-Protein C
* GFP-Protein D
* GFP-Protein E
* GFP-Mutant A
* GFP-Mutant B
* Buffer only
* GFP
* GFP-Nuc
* GFP-Cyto
* GFP-PM
* GFP-ER
* GFP-Golgi
* GFP-NM
* GFP-Mito

*Treatments*:

* Growth Media

**FLOW CYTOMETRY**

N/A

**WESTERN BLOTTING**

N/A

**MICROSCOPY**

Experimental Conditions

1. Microscopy Analysis

* Antibody Labelling IF

2. *Condition:*

* GFP (green)

|  |  |
| --- | --- |
| GFP | Same for all conditions = cytoplasmic + nuclear |
| GFP-Protein A | ER |
| GFP-Protein B | Nucleus |
| GFP-Protein C | Plasma membrane |
| GFP-Protein D | Cytoplasm |
| GFP-Protein E | Mitochondria |
| GFP-Mutant A | Plasma membrane |
| GFP-Mutant B | cytoplasm |
| GFP-Nuc | Same for all conditions=nuclear |
| GFP-Cyto | Same for all conditions=cytoplasm |
| GFP-PM | Same for all conditions=plasma membrane |
| GFP-ER | Same for all conditions=ER |
| GFP-Golgi | Same for all conditions=golgi |
| GFP-NM | Same for all conditions=nuclear membrane |
| GFP-Mito | Same for all conditions=mitochondria |

*Randomization:*

Randomly microscopy images that appear from a group of potential images. Select from the appropriate folder the image to be used (from 5-10 photos)