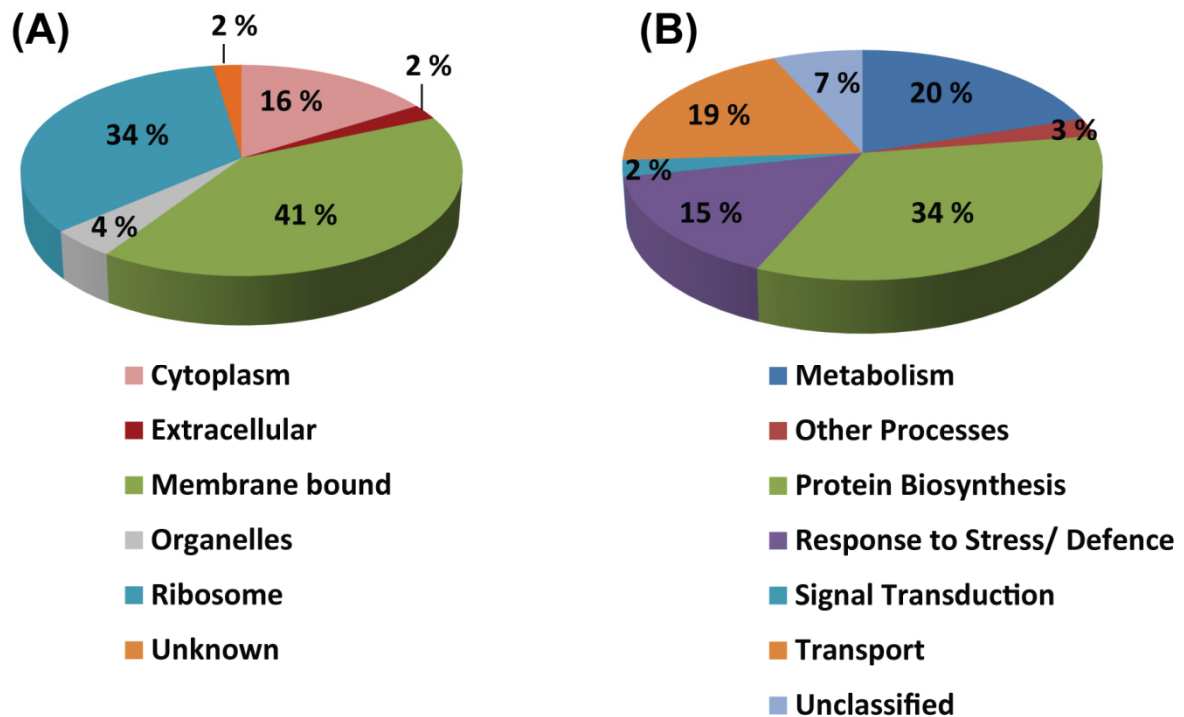


**SUPPLEMENTAL MATERIAL: SUPPLEMENTAL FIGURES AND LEGENDS OF  
SUPPLEMENTAL TABLES**

**Quantitative Proteomics Reveals that Plasma Membrane Microdomains from Poplar  
Cell Suspension Cultures are Enriched in Markers of Signal Transduction, Molecular  
Transport and Callose Biosynthesis**

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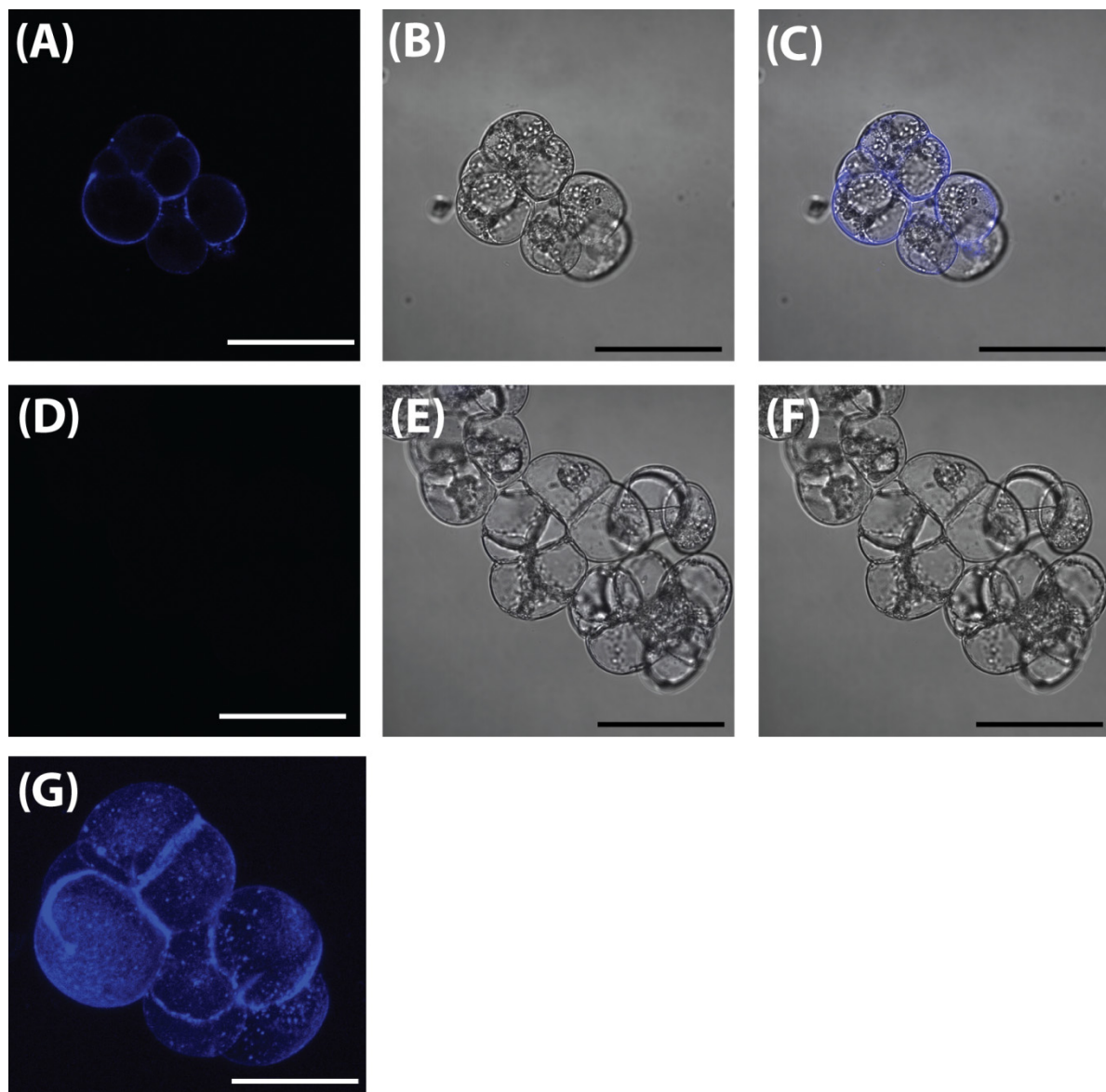
**Supplemental Figure 1:**



**Fig. S1. Predicted cellular localization (A) and functional classification (B) of proteins identified after SDS-PAGE analysis of the TE fraction. Gene ontology information was retrieved from TAIR ([www.arabidopsis.org](http://www.arabidopsis.org)).**

**Supplemental Figure 2:**

**Callose staining and measurement:** Cells from suspension cultures were washed with 0.1 M  $K_2HPO_4$  (pH 8.5) and stained with 0.01 % aniline blue for 12 min. Confocal imaging was performed using an inverted Zeiss LSM 780 microscope fitted with a 63 x 1.15 NA water immersion objective. A 405 diode laser (30 mW) was set at 5.5 % for excitation of aniline blue and emission was detected between 420 and 515 nm. The 405 laser was set to 0.6 % for bright field imaging. A maximum intensity projection was generated from 47 images acquired with an interval of 0.8  $\mu m$  (Fig. S2, G). The ZEN 2011 (Zeiss) software was used for image acquisition and processing.



**Fig. S2. Callose detection in poplar cells.** Cells incubated in  $K_2HPO_4$  buffer with (A-C and G) or without (D-F) aniline blue. A, D, and G: fluorescence image; B and E, corresponding transmission image of A and D, respectively; C, overlaid image of A and B; F, overlaid image of D and E; G, confocal maximum intensity projection image of poplar cells stained with aniline blue. Scale bars represent 20  $\mu m$ .

## Legends of supplemental Tables

**Supplemental Table S1** - List of unique proteins and their corresponding peptides obtained from in-gel and solution (iTRAQ) proteomics analysis. Results are shown in the following sheets:

1. **DRM-Proteins from SDS-PAGE** - List of unique DRM proteins and their corresponding peptides identified from SDS-PAGE gels.
2. **PMF- Proteins from SDS-PAGE** - List of unique PMF proteins and their corresponding peptides identified from SDS-PAGE gels.
3. **TE- Proteins from SDS-PAGE** - List of unique TE proteins and their corresponding peptides identified from SDS-PAGE gels.
4. **Total-InGel+iTRAQidentification** - Combined list of unique proteins and their corresponding peptides obtained from in-gel and solution (iTRAQ) proteomics analysis.

**Supplemental Table S2** - List of unique PMF and DRM proteins and their corresponding peptides quantified by iTRAQ. Results from each biological replicate are shown in the following sheets:

1. **BR1-iTRAQquant** - List of unique PMF and DRM proteins quantified by iTRAQ (first biological replicate).
2. **BR1-iTRAQquant+peptides** - List of unique PMF and DRM proteins and their corresponding peptides quantified by iTRAQ (first biological replicate).
3. **BR2-iTRAQquant** - List of unique PMF and DRM proteins quantified by iTRAQ (second biological replicate).
4. **BR2-iTRAQquant+peptides** - List of unique PMF and DRM proteins and their corresponding peptides quantified by iTRAQ (second biological replicate).
5. **BR3-iTRAQquant** - List of unique PMF and DRM proteins quantified by iTRAQ (third biological replicate).
6. **BR3-iTRAQquant+peptides** - List of unique PMF and DRM proteins and their corresponding peptides quantified by iTRAQ (third biological replicate).

**Supplemental Table S3** - MS/MS spectra of peptides used for single-peptide based protein identification in DRM samples analyzed by SDS-PAGE.

**Supplemental Table S4** - MS/MS spectra of peptides used for single-peptide based protein identification in PMF samples analyzed by SDS-PAGE.

**Supplemental Table S5** - MS/MS spectrum of peptides used for single-peptide based protein identification in TE samples analyzed by SDS-PAGE.

**Supplemental Table S6** - MS/MS spectra of peptides from the DRM and PMF samples used for single-peptide based protein identification in the 1<sup>st</sup> biological replicate (iTRAQ experiments).

**Supplemental Table S7** - MS/MS spectra of peptides from the DRM and PMF samples used for single-peptide based protein identification in the 2<sup>nd</sup> biological replicate (iTRAQ experiments).

**Supplemental Table 8** - MS/MS spectra of peptides from the DRM and PMF samples used for single-peptide based protein identification in the 3<sup>rd</sup> biological replicate (iTRAQ experiments).