Figure S4. MIRE vesicle proteomics list (1 of 2)

Protein

1 2 3 4 5

| | | | | | | | | _ | _ | _ | - | _ |
|----------------------|--|-----|-----|---------------|----|-----|--------------------------------------|---|---|---|---------------|--------------|
| | Protein | 1 | 2 | 3 | 4 | 5 | Vesicle Trafficking | | | | | |
| | | _ | _ | _ | • | | Clathrin heavy chain | Χ | | X | X | |
| | Cargo/membrane | | | | | | EBP50 | Х | Х | X | Χ | X |
| | α-1 catenin | X | Χ | \rightarrow | | Χ | IQGAP1 | Х | | Х | X | X |
| | α-2 Integrin | X | | X | Х | Χ | Myosin 1b | Х | | Х | Χ | Х |
| | Annexin-A2 | X | Х | X | Х | Χ | Myosin 1c | Х | | Х | Х | Х |
| | α-V Integrin | X | Х | | Χ | Χ | Myosin 1d | Χ | Х | Х | Х | X |
| | β-1 Integrin | | Х | Х | | Χ | Rab10 | Х | Х | | $\overline{}$ | Х |
| | β-3 Integrin | | | | Х | Χ | Rab11 | Х | Х | | | |
| | Basigin | | | | Х | Х | Rab7 | Х | Х | | $\overline{}$ | Х |
| \star | β-catenin | X | Х | Х | Х | Х | | | | | | |
| | | | | П | | | | | | | | |
| | BSCv (Adipocyte plasma membrane-associated protein | X | | x | χl | | Protein | 1 | 2 | 2 | 1 | 5 |
| | CLIC 4 | Х | | | Х | Х | | - | _ | 3 | - | 3 |
| | δ-1 catenin | Х | Х | Х | Х | Х | Cytoskeletal | | | | | |
| | EGFR kinase substrate 8 | Х | | | Х | Х | α -actinin1 | Х | Х | Х | X | X |
| \Rightarrow | Endometrial Mucin-1 | İχ | | П | | X | α-actinin2 | | | | Х | Х |
| ^ | Epithelial Cell Adhesion Molecule | Х | | | Х | Х | α -actinin4 | Х | Х | Х | Х | X |
| | Galectin-3 | | | П | Х | Х | Actin | Х | Х | Х | Х | X |
| | Galphai2 | X | Х | | | | Ankyrin-3 | Х | | | $\overline{}$ | Х |
| | Guanine Nucletide B.P. Alpha 13 subunit | X | | | Х | X | Ezrin | Х | Х | Х | Х | Х |
| | Guanine Nucletide B.P. Alpha inhib | | | | Χ | Х | Keratin | Х | Х | Х | Х | \mathbf{x} |
| | Guanine Nucletide B.P. G(s) alpha subunit | Ιx | X | П | X | -, | Moesin | Х | | Х | Х | Х |
| | Guanine Nucletide B.P. G(v) alpha subunit | | X | х | , | | | | | | _ | — |
| \overrightarrow{x} | MDR-1 | X | X | X | Х | Х | | | | | | |
| | Na/K transporting ATPase | X | X | X | X | X | Protein | 1 | 2 | 3 | 1 | 5 |
| | PDZ domain containing protein1 | X | , · | X | X | X | | - | _ | | _ | • |
| \checkmark | Plasma membrane Ca-transporting ATPase 1 | T (| | X | X | , · | Signalling | | | | | |
| ~ | Solute carrier family 2 | X | | | X | | G protein-coupled receptor family C5 | | | | X | X |
| | Solute carrier family 3 | X | Х | Х | x | | Inhibitor of NFκB | Х | Χ | | | |
| | Vacuole ATP synthase catalytic subunit | X | X | X | X | Х | Prostaglandin F2 | Х | | Х | Х | Х |
| | vacable ATT Synthase catalytic subunit | 1^ | | | | | Src | Х | | Х | Х | Х |
| | | | | | | | | | | | | |

★ Known ARE proteins★ Known Apical Proteins

The purified population of microsomes was reduced, denatured and subjected to SDS-PAGE. The sample was only electrophoresed about one cm into the gel, and Coomassie stained. This material that formed a smear then was excised, and proteins were in-gel digested and applied to a LC MS/MS mass spectrometer to generate tandem mass spectra and subsequently a list of proteins. High quality identification of proteins that occurred in two or more of five independent analyses (columns 1-5) are shown. Detection in the analysis is indicated by an X.

Figure S4. MIRE vesicle proteomics list (2 of 2)

| Protein | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| Unknown | | | | | |
| 2,3-cyclic-nucleotide 3-phosphodiesterase (CNPase) | | | Χ | Χ | |
| Cytoplasmic FRM1 interacting protein 1 | X | | | Χ | Х |
| FARP1 | X | | | Χ | Х |
| FERM, RhoGEF | | Χ | Х | Х | Х |
| Ferritin L | X | Χ | | | Х |
| GNB2 | | | | Х | Х |
| I-plastin | X | | Χ | Х | Х |
| Junction Plakoglobin | X | Χ | Х | Х | Х |
| KIAA1815 | X | | Χ | | |
| Myoferlin | X | Х | | | Х |
| Niban | X | Χ | | | |
| Nicastrin | X | Х | | | Х |
| Plexin B2 | X | Х | | Х | Х |
| PLS1 | X | | | | Х |
| prolyl 4-hydroxylase | X | | | Х | |
| Serine/Threonine-peotein kinase MST4 | X | | | Х | |
| Serine/Threonine-protein phosphatase PP1 | Х | | | | Х |
| Stomatin | X | Χ | | Χ | Х |
| thioredoxin | Х | | Х | Х | |
| Tissue- alpha-L-fucosidase | X | Х | | | |

| Protein | 1 | 2 | 3 | 4 | 5 |
|---|-----------|----------|----------|----------|--------|
| ER/Golgi | | | | | |
| Dolichyl-diphosphooligosaccaride | X | | Х | Х | Х |
| Endoplasmin | X | Х | Х | Х | Х |
| Gamaglutamyltranspeptidase1 | X | Х | | Х | Х |
| Glutamyl aminopeptidase | X | | Х | Х | |
| GRP78 | X | | Х | Х | Χ |
| HSP70 | X | | | | Х |
| HSP71 | X | | Х | Х | Х |
| N-acylsphingosine amidohydrolase | X | Х | | | |
| Protein Disulfide isomerase A3 | X | | Х | Х | Х |
| Protein Disulfide isomerase A4 | X | | Х | | X |
| Protein Disulfide isomerase A6 | X | | | | Χ |
| | | | | | |
| Protein | 1 | 2 | 3 | 4 | 5 |
| Protein Lysosomal | 1 | 2 | 3 | 4 | 5 |
| Lysosomal | 1 | 2 | 3 | 4 | 5 X |
| | | _ | 3 | | |
| Lysosomal Cathespin D | _ X | X | | X | |
| Lysosomal Cathespin D | _ X | X | | X | |
| Lysosomal Cathespin D | X X | X | | X | × |
| Lysosomal Cathespin D LAMP-1 | X X | X | X | X | × |
| Lysosomal Cathespin D LAMP-1 Protein | X X | X | X | X | × |
| Lysosomal Cathespin D LAMP-1 Protein Mitochondrial | X X X | 2 | 3 | х х | × |

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