OptiPrep™ Reference List RS13

Resolution of soluble cytosolic proteins from membrane vesicles and organelles

There are three Application Sheets listed in the Application Sheet Index under "**Protein localization (membrane *versus* cytosol)**" which describe different gradient strategies. These Application Sheets (described below) can be accessed via the following website www.OptiPrep.com (click on "**Methodology**", then "**Organelles and subcellular membranes**" and follow the links from the Index):

- **Discontinuous gradient: OptiPrep™ Application Sheet S35**
- **Self-generated gradient: OptiPrep™ Application Sheet S36**
- **A special strategy for rapid resolution of protein complexes and cytosol: OptiPrep™ Application Sheet S37**
- **Note that Reference Lists of papers addressing the resolution of mammalian cell exosomes and other microvesicles from soluble proteins are covered in OptiPrep™ Reference List RS10 and the similar resolution of bacterial and fungal microvesicles in RS11.**

The reference list, which follows, includes principally papers describing the separation of membranes and soluble (cytosolic) proteins (**Section 1**); it is divided alphabetically into source material (**cell or tissue type**). It includes both mammalian and non-mammalian sources and in each of the 26 sections, references are listed alphabetically according to first author. References in **Section 1a** describe the use of the gradients to isolate in addition, lipid droplets. **Section 2** lists a few papers that report the study of previously prepared subcellular membranes to determine the distribution of a particular protein between the soluble fraction and the organelle(s). Others describe the separation of vesicles either budded from the cells or obtained from permeabilized cells.

- Key words in titles are highlighted in light blue.

1. Cells or tissues

1.1. Algae

Baquero, E., Fedry, J., Legrand, P., Krey, T. and Rey, F.A. (2019) *Species-specific functional regions of the green alga gamete fusion protein HAP2 revealed by structural studies* Structure **27**, 113–124

Wood, C.R. and Rosenbaum, J.L. (2014) *Proteins of the ciliary axoneme are found on cytoplasmic membrane vesicles during growth of cilia* Curr. Biol., **24**, 1114-1120

1.2. Bacteria

De Leeuw, E., Poland, D., Mol, O., Sinning, I., et al (1997) *Membrane association of FtsY, the E. coli SRP receptor* FEBS Lett., **416**, 225-229

Herskovits, A.A., Seluanov, A., Rajsbaum, R., ten Hagen-Jongman, C.M., et al (2001) *Evidence for coupling of membrane targeting and function of the signal recognition particle (SRP) receptor FtsY* EMBO Rep., **2,** 1040-1046

Valent, Q.A., Scotti, P.A., High, S., de Gier, J-W.L., et al (1998) *The Escherichia coli SRP and SecB targeting pathways converge at the translocon* EMBO J., **17**, 2504-2512

1.3. Brain

Ding, T.T., Lee, S-J., Rochet, J-C. and Lansbury, Jr., P.T. (2002) *Annular α-synuclein protofibrils are produced when spherical protofibrils are incubated in solution or bound to brain-derived membranes* Biochemistry, **41**, 10209-10217

Wang, X., Bowers, S.L., Wang, F., Pu, X-a., et al (2009) *Cytoplasmic prion protein induces forebrain neurotoxicity* Biochim. Biophys. Acta **1792**, 555–563

1.4. Carcinoma (incl HeLa)cells

Adolf, F., Rhiel, M., Hessling, B., Gao, Q., Hellwig, A., Béthune, J. and Wieland, F.T. (2019) *Proteomic profiling of mammalian COPII and COPI vesicles* Cell Rep., **26**, 250–265

Blake Richardson, R., Ohlson, M.B., Eitson, J.L., Kumar, A., McDougal, M.B., Boys, I.N., Mar, K.B., De La Cruz-Rivera, P.C. et al (2018) *A CRISPR screen identifies IFI6 as an ER-resident interferon effector that blocks flavivirus replication* Nat. Microbiol. **3**, 1214–1223

Collins, L.L., Simon, G., Matheson, J., Wu, C., et al (2012) *Rab11-FIP3 is a cell cycle-regulated phosphoprotein* BMC Cell Biol., **13**: 4

Guan, J-J., Zhang, X-D., Sun, W., Qi, L., Wu, J-C. and Qin, Z-H. (2015) *DRAM1 regulates apoptosis through increasing protein levels and lysosomal localization of BAX* Cell Death Dis., **6**: e1624

Hasegawa, H., Thomas, H.J., Schooley, K. and Born, T.L. (2011) *Native IL-32 is released from intestinal epithelial cells via a non-classical secretory pathway as a membrane-associated protein* Cytokine, **53**, 74–83

Jorgensen, I., Bednar, M.M., Amin, V., Davis, B.K., et al (2011) *The Chlamydia protease CPAF regulates host and bacterial proteins to maintain pathogen vacuole integrity and promote virulence* Cell Host Microbe, **10**, 21–32

Kaeser-Pebernard, S., Diedrich, B. and Dengjel, J (2019) *Identification and regulation of multimeric protein complexes in autophagy via SILAC-based mass spectrometry approaches* In Autophagy: Methods and Protocols, Methods in Molecular Biology, **vol. 1880** (ed. Ktistakis, N. and Florey, O.), Springer Science+Business Media LLC New York, pp 341-357

Lee, E-Y., Park, K-S., Yoon, Y.J., Lee, J., et al (2012) *Therapeutic effects of autologous tumor-derived nanovesicles on melanoma growth and metastasis* PLoS One **7**: e33330

Lee, S.M., Olzmann, J.A., Chin, L-S. and Li, L. (2011) *Mutations associated with Charcot–Marie–Tooth disease cause SIMPLE protein mislocalization and degradation by the proteasome and aggresome–autophagy pathways* J. Cell Sci., **124**, 3319–3331

Méndez, E., Aguirre-Crespo, G., Zavala, G. and Arias, C.F. (2007) *Association of the astrovirus structural protein VP90 with membranes plays a role in virus morphogenesis* J. Virol., **81**, 10649-10658

Mira, E., Lacalle, R.A., Buesa, J.M., Gonzalez de Buitrago, G., et al (2004) *Secreted MMP9 promotes angiogenesis more efficiently than constitutive active MMP9 bound to the tumor cell surface* J. Cell Sci., **117**, 1847-1856

Murillo, A., Vera-Estrella, R., Barkla, B.J., Méndez, E. and Arias, C.F. (2015) *Identification of host cell factors associated with astrovirus replication in Caco-2 cells* J. Virol., 89, 10359 –10370

Salman, E.D., He, D., Runge-Morris, M., Kocarek, T.A., et al (2011) *Site-directed mutagenesis of human cytosolic sulfotransferase (SULT) 2B1b to phospho-mimetic Ser348Asp results in an isoform with increased catalytic activity* J. Steroid Biochem. Mol. Biol., **127**, 315– 323

Wang, X., Wang, F., Sy, M-S- and Ma, J. (2005) *Calpain and other cytosolic proteases can contribute to the degradation of retro-translocated prion protein in the cytosol* J. Biol. Chem., **280**, 317-325

Welsch, S., Habermann, A., Jäger, S., Müller, B., et al (2006) *Ultrastructural analysis of ESCRT proteins suggests a role for endosome-associated tubular–vesicular membranes in ESCRT function* Traffic, **7**, 1551-1566

1.5. CHO cells

Lin, C-C., Love, H.D., Gushue, J.N., Bergeron, J.J.M., et al (1999) *ER/Golgi intermediates acquire Golgi enzymes by Bredelfin A – sensitive retrograde transport in vitro* J. Cell. Biol., **147**, 1457-1472

Love, H.D., Lin, C.C., Short, C.S. and Ostermann, J. (1998) *Isolation of functional Golgi-derived vesicles with a possible role in retrograde transport* J. Cell Biol., **140**, 541-551

1.6. COS cells

Dicu, A.O., Topham, M.K., Ottaway, L. Epand, R.M. (2007) *Role of the hydrophobic segment of diacylglycerol kinase ε* Biochemistry, **46**, 6109-6117

Kim, Y.S., Laurine, E., Woods, W. and Lee, S-J. (2006) *A novel mechanism of interaction between α-synuclein and biological membranes* J. Mol. Biol., **360**, 386-397

Lee, H-J., Choi, C. and Lee, S-J. (2002) *Membrane-bound α-synuclein has a high aggregation propensity and the ability to seed the aggregation of cytosolic form* J. Biol. Chem., **277,** 671-678

1.7. Glioblastoma cells

Bruntz, R.C., Taylor, H.E., Lindsley, C.W. and Brown, H.A. (2014) *Phospholipase D2 mediates survival signaling through direct regulation of Akt in glioblastoma cells* J. Biol. Chem., **289**, 600-616

1.8. HEK cells

Burnett, A. and Spearman, P. (2007) *APOBEC3G multimers are recruited to the plasma membrane for packaging into human immunodeficiency virus type 1 virus-like particles in an RNA-dependent process requiring the NC basic linker* J. Virol., **81**, 5000-5013

Chatel-Cjaix, L., Abrahamyan, L., Fréchina, C., Mouland, A.J., et al (2007) *The host protein Staufen1 participates in human immunodeficiency virus type 1 assembly in live cells by influencing* $pr55^{Gag}$ *multimerization* J. Virol., **81**, 6216-6230

Derdowski, A., Ding, L. and Spearman, P. (2004) *A novel fluorescence resonance energy transfer assay demonstrates that the human immunodeficiency virus type I* $Pr55^{Gag}$ *I domain mediates Gag-Gag interactions* J.Virol., **78**, 1230-1242

Dou, J., Wang, J-J., Chen, X., Li, H., et al (2009) *Characterization of a myristoylated, monomeric HIV Gag protein* Virology **387**, 341–352

Gottwein, E. and Kräusslich, H-G. (2005) *Analysis of human immunodeficiency virus type 1 Gag ubiquitination* J. Virol., **79**, 9134-9144

Halwani, R., Cen, S., Javanbakht, H., Saadatmand, J., et al (2004) *Cellular distribution of lysyl-tRNA synthetase and its interaction with Gag during human immunodeficiency virus type 2 assembly* J. Virol., **78**, 7553-7564

Jäger, S., Gottwein, Kräusslich, H-G. (2007) *Ubiqutination of human immunodeficiency virus type 1 Gag is highly dependent on Gag membrane association* J. Virol., **81**, 9193-9201

Li, H., Dou, J., Ding, L and Spearman, P. (2007) *Myristoylation is required for human immunodeficiency virus type 1 Gag-Gag multimerization in mammalian cells* J. Virol., **81**, 12899-12910

Lee, S.M., Olzmann, J.A., Chin, L-S. and Li, L. (2011) *Mutations associated with Charcot–Marie–Tooth disease cause SIMPLE protein mislocalization and degradation by the proteasome and aggresome–autophagy pathways* J. Cell Sci., **124**, 3319–3331

Runkler, N., Pohl, C., Schneider-Schaulles, S., Klenk, H-D., et al (2007) *Measles virus nucleocapsid transport to the plasma membrane requires stable expression and surface accumulation of the viral matrix protein* Cell. Microbiol., **9**, 1203-1214

Schlehe, J.S., Lutz, A.K., Pilsl, A., Lämmermann, K., et al (2008) *Aberrant folding of pathogenic Parkin mutants: Aggregation versus degradation* J. Biol. Chem., **283**, 13771-13779

Shtanko, O., Imai, M., Goto, H., Lukashevich, I.S., et al (2010) *A role for the C terminus of Mopeia virus nucleoprotein in its incorporation into Z protein-induced virus-like particles* J. Virol., **84**, 5415-5422

1.9. Hepatocytes

Aligo, J., Jia, S., Manna, D. and Konan, K.V. (2009) *Formation and function of hepatitis C virus replication complexes require residues in the carboxy-terminal domain of NS4B protein* Virology **393**, 68–83

1.10. Hepatoma cells

Cho, N-J., Cheong, K.H., Lee, C.H., Frank, C.W. et al (2007) *Binding dynamics of hepatitis C virus NS5A amphipathic peptide to cell and model membranes* J. Virol., **81**, 6682-6689

Döring, T., Zeyen, L., Bartusch, C. and Prange, R. (2018) *Hepatitis B virus subverts the autophagy elongation complex Atg5-12/16L1 and does not require Atg8/LC3 lipidation for viral maturation* J. Virol., **92**: e01513-17

Elazar, M., Liu, P., Rice, C.M. and Glenn, J.S. (2004) *An N-terminal amphipathic helix in hepatitis C virus (HCV) NS4B mediates membrane association, correct localization of replication complex proteins, and RNA replication* J. Virol., **78**, 11393-11400

Han, Q., Aligo, J., Manna, D., Belton, K., et al (2011) *Conserved GXXXG- and S/T-like motifs in the transmembrane domains of NS4B protein are required for hepatitis C virus replication* J. Virol., **85**, 6464–6479

Strecker, T., Maisa, A., Daffis, S., Eichler, R., et al (2006) *The role of myristoylation in the membrane association of the Lassa virus matrix protein Z* Virology, J., **3**, 93

Vogt, D.A., Camus, G., Herker, E., Webster, B.R., Tsou, C-L., Greene, W.C., Yen, T-S.B. and Ott, M. (2013) *Lipid droplet-binding protein TIP47 regulates hepatitis C virus RNA replication through interaction with the viral NS5A protein* PLoS Pathog., **9**: e1003302

1.11 Insect cells

Hatanaka, R., Hagiwara-Komoda, Y., Furuki, T., Kanamori, Y., et al (2013) *An abundant LEA protein in the anhydrobiotic midge, PvLEA4, acts as a molecular shield by limiting growth of aggregating protein particles* Insect Biochem. Mol. Biol., **43**, 1055-1067

Kruppa, A.J., Ott, S., Chandraratna, D.S., Irving, J.A., et al (2013) *Suppression of Aβ toxicity by puromycin-sensitive aminopeptidase is independent of its proteolytic activity* Biochim. Biophys. Acta, 1832, 2115–2126

1.12. Jurkat cells

Frankel, A.D., Alber, T., Zhou, Q. and Krogan, N.J. (2011) *Purification and characterization of HIV–human protein complexes* Methods, **53**, 13–19

Geist, M.M., Pan, X., Bender, S., Bartenschlager, R., et al (2014) *Heterologous Src homology 4 domains support membrane anchoring and biological activity of HIV-1 Nef* J. Biol. Chem., **289**, 14030–14044

1.13. Kidney proximal tubule cells (incl. LLC-PK1)

Fölsch, H., Pypaert, M., Maday, S., Pelletier, L., et al (2003) *The AP-1A and AP1B clathrin adaptor complexes define biochemically and functionally distinct membrane domains* J. Cell Biol., **163**, 351-362

Nürnberger, J., Bacallao, R.L. and Phillips, C.P. (2002) *Inversin forms a complex with catenins and N-cadherin in polarized epithelial cells* Mol. Biol. Cell, **13**, 3096-3106

1.14. Liver

Kanayama, M., Xu, S., Danzaki, K., Gibson, J.R., Inoue, M., Gregory, S.G. and Shinohara, M.L. (2017) *Skewing of the population balance of lymphoid and myeloid cells by secreted and intracellular osteopontin* Nat. Immunol., **18**, 973-984

Nakatsuka, A., Wada, J., Iseda, I., Teshigawara, S., et al (2012) *Vaspin is an adipokine ameliorating ER stress in obesity as a ligand for cell-surface GRP78/MTJ-1 complex* Diabetes, **61**, 2823–2832

1.15 Lung cells

Kanayama, M., Xu, S., Danzaki, K., Gibson, J.R., Inoue, M., Gregory, S.G. and Shinohara, M.L. (2017) *Skewing of the population balance of lymphoid and myeloid cells by secreted and intracellular osteopontin* Nat. Immunol., **18**, 973-984

1.16 Lymphocytic cells

Onnis, A., Cianfanelli, V., Cassioli, C., Samardzic, D., Pelicci, P.G., Cecconi, F. and Baldari, C.T. (2018) *The pro-oxidant adaptor p66SHC promotes B cell mitophagy by disrupting mitochondrial integrity and recruiting LC3-II* Autophagy **14**, 2117–2138

1.17 MDCK cells

Grindstaff, K.K., Yeaman, C., Anandasabapathy, N., Hsu, S.C., et al (1998) *Sec6/8 complex is recruited to cell-cell contacts and specifies transport vesicle delivery to the basal-lateral membrane in epithelial cells* Cell, **93**, 731-740

Gromley, A., Yeaman, C., Rosa, J., Redick, S., et al (2005) *Centriolin anchoring of exocyst and SNARE complexes at the midbody is required for secretory-vesicle-mediated abscission* Cell, **123**, 75-87

Hansen, M.D.H. and Nelson, W.J. (2001) *Serum-activated assembly and membrane translocation of an endogenous Rac1: effector complex* Curr. Biol., **11**, 356-360

Hansen, M.D., Ehrlich, J.S. and Nelson, W.J. (2002) *Molecular mechanism for orienting membrane and actin dynamics to nascent cell-cell contacts in epithelial cells* J. Biol. Chem., **277**, 45371-45376

Imai, M., Kawasaki, K. and Odagiri, T. (2008) *Cytoplasmic domain of influenza virus BM2 protein plays critical roles in production of infectious virus* J. Virol., **82**, 728-739

Matern, H.T., Yeaman, C., Nelson, W.J. and Scheller, R.H. (2001) *The Sec6/8 complex in mammalian cells: characterization of mammalian Sec3, subunit interactions, and expression of subunits in polarized cells* Proc. Natl. Acad. Sci, USA, **98**, 9648-9653

Scheiffele, P., Verkade, P., Fra, A.M., Simons, K., et al (1998) *Caveolin-1 and –2 in the exocytic pathway of MDCK cells* J. Cell Biol., **140**, 795-806

Weiskircher, E., Aligo, J., Ning, G. and Konan, K.V. (2009) *Bovine viral diarrhea virus NS4B protein is an integral membrane protein associated with Golgi markers and rearranged host membranes* Virol. J. **6**: 185

1.18. Monkey kidney cells

McKenzie, J., Johannes, L., Taguchi, T.and Sheff, D. (2009) *Passage through the Golgi is necessary for Shiga toxin B subunit to reach the endoplasmic reticulum* FEBS J., **276**, 1581–1595

1.19. Mouse embryo fibroblasts

Lee, H-J., Cho, E-D., Lee, K.W., Kim, J-H., et al (2013) *Autophagic failure promotes the exocytosis and intercellular transfer of α-synuclein* Exp. Mol. Medi., **45**, e22

1.20. Neuroblastoma cells

Bae, E-J., Ho, D-H., Park, E., Jung, J.W., et al (2013) *Lipid peroxidation product 4-hydroxy-2-nonenal promotes seeding-capable oligomer formation and cell-to-cell transfer of α-synuclein* Antioxid. Redox Signal., **18**, 770–783

Kim, Y.S., Laurine, E., Woods, W. and Lee, S-J. (2006) *A novel mechanism of interaction between α-synuclein and biological membranes* J. Mol. Biol., **360**, 386-397

Jang, A., Lee, H-J., Suk, J-E., Jung, J-W., et al (2010) *Non-classical exocytosis of α-synuclein is sensitive to folding states and promoted under stress conditions* J. Neurochem., **113**, 1263–1274

Lee, H.J., Patel, S. and Lee, S-J. (2005) *Intravesicular localization and exocytosis of α-synuclein and its aggregates* J. Neurosci., **25**, 6016-6024

Lee, H-J., Cho, E-D., Lee, K.W., Kim, J-H., et al (2013) *Autophagic failure promotes the exocytosis and intercellular transfer of α-synuclein* Exp. Mol. Medi., **45**, e22

Lee, S.M., Olzmann, J.A., Chin, L-S. and Li, L. (2011) *Mutations associated with Charcot–Marie–Tooth disease cause SIMPLE protein mislocalization and degradation by the proteasome and aggresome–autophagy pathways* J. Cell Sci., **124**, 3319–3331

Mamada, N., Tanokashira, D., Ishii, K., Tamaoka, A. and Araki, W. (2017) *Mitochondria are devoid of amyloid β-protein (Aβ)-producing secretases: Evidence for unlikely occurrence within mitochondria of Ab generation from amyloid precursor protein* Biochem. Biophys. Res. Comm., **486**, 321-328

Schlehe, J.S., Lutz, A.K., Pilsl, A., Lämmermann, K., et al (2008) *Aberrant folding of pathogenic Parkin mutants: Aggregation versus degradation* J. Biol. Chem., **283**, 13771-13779

Wang, X., Wang, F., Arterburn, L., Wollmann, R., et al (2006) *The interaction between cytoplasmic prion protein and the hydrophobic lipid core of membrane correlates with neurotoxicity* J. Biol. Chem., **281**, 13559-13565

Yu, C., Kim, S-H., Ikeuchi, T., Xu, H., et al (2001) *Characterization of a presenilin-mediated APP carboxyl terminal fragment γ: Evidence for distinct mechanisms involved in gamma-secretase processing of the APP and notch 1 transmembrane domains* J. Biol. Chem., **276**, 43756-43760

1.21. NRK cells

Joglekar, A.P., Xu, D., Rigotti, D.J., Fairman, R., et al (2003) *The SNARE motif contributes to rbet1 intracellular targeting and dynamics independently of SNARE interactions* J. Biol. Chem., **278**, 14121-14133

Yeaman, C., Grindstaff, K.K., Wright, J.R. and Nelson, W.J. (2001) *Sec6/8 complexes on trans-Golgi network and plasma membrane regulate stages of exocytosis in mammalian cells* J. Cell Biol., **155**, 593-604

1.22 Pheochromocytoma (PC12) cells

Thayanidhi, N., Liang, Y., Hasegawa, H., Nycz, D.C., et al (2012) *R-SNARE ykt6 resides in membrane-associated protease-resistant protein particles and modulates cell cycle progression when over-expressed* Biol. Cell, **104**, 397–417

1.23 Plant cells

Liu, Z., Zhu, Y., Gao, J., Yu, F., et al (2009) *Molecular and reverse genetic characterization of nucleosome assembly protein1 (NAP1) genes unravels their function in transcription and nucleotide excision repair in Arabidopsis thaliana* Plant J., **59**, 27–38

Mahon, P. and Dupree, P. (2001) *Quantitative and reproducible two-dimensional gel analysis using Phoretix 2D Full* Electrophoresis, **22**, 2075-2085

1.24 Squid axons

LaPointe, N.E., Morfini, G., Pigino, G., Gaisina, I.N., et al (2009) *The amino terminus of tau inhibits kinesin-dependent axonal transport: Implications for filament toxicity* J. Neurosci. Res., 87, 440-451

Zamponi, E., Buratti, F., Cataldi, G., Caicedo, H.H., Song, Y., Jungbauer, L.M., LaDu, M.J., Bisbal, M. et al (2017) *Prion protein inhibits fast axonal transport through a mechanism involving casein kinase 2* PLoS One, 12: e0188340

1.25 Vero cells

Eichler, R., Strecker, T., Kolesnikova, L., ter Meulen, J., et al (2004) *Characterization of the Lassa virus matrix protein Z: electron microscopic study of virus-like particles and interaction with the nucleoprotein (NP)* Virus Res., **100**, 249-255

Kim, M., Mackenzie, J.M. and Westaway, E.G. (2004) *Comparisons of physical separation methods of Kunjin virus-induced membranes* J. Virol. Methods, **120**, 179-187

Kraus, I., Eickmann, M., Kiermeyer, S., Scheffczik, H., et al (2001) *Open reading frame III of Borna disease virus encodes a nonglycosylated matrix protein* J. Virol., **75**, 12098-12104

1.26 *Xenopus*

Hülsmann, B.B., Labokha, A.A. and Görlich, D. (2012) *The permeability of reconstituted nuclear pores provides direct evidence for the selective phase model* Cell, **150**, 738–751

1.27 Yeast

Chen, S.H., Chen, S., Tokarev, A.A., Liu, F., et al (2005) *Ypt3132 GTPases and their novel F-Box effector protein Rcy1 regulate protein recycling* Mol. Biol. Cell, **16**, 178-192
Cox, R., Chen, S.H., Yoo, E. and Segev, N. (2007) *Conservation of the TRAPPII-specific subunits of a Ypt/Rab exchanger complex* BMC Evol. Biol., **7:**12
Diaz, A., Zhang, J., Ollwerther, A., Wang, X. and Ahlquist, P. (2015) *Host ESCRT proteins are required for bromovirus RNA replication compartment assembly and function* PLoS Pathog., **11**: e1004742
Du, L-L. and Novick, P. (2001) *Yeast Rab GTPase-activating protein Gyp1p localizes to the Golgi apparatus and is a negative regulator of Ypt1p* Mol. Biol. Cell, **12**, 1215-1226
Elkind., N.B., Walch-Solimena, C. and Novick, P.J. (2002) *The role of the COOH terminus of Sec2p in the transport of post-Golgi vesicles* J. Cell Biol., **149**, 95-110
Ge, W., Chew, T.G., Wachtler, V., Naqvi, S.N., et al (2005) *The novel fission yeast protein Pal1p interacts with Hip1-related Sla2p/End4p and is involved in cellular morphogenesis* Mol. Biol. Cell, **16**, 4124-4138
Huch, S., Gommlich, J., Muppavarapu, M., Beckham, C. and Nissan, T. (2016) *Membrane-association of mRNA decapping factors is independent of stress in budding yeast* Sci. Rep., **6**: 25477
Liu, L., Westler, W.M., den Boon, J.A., Wang, X., et al (2009) *An amphipathic α-helix controls multiple roles of Brome mosaic virus protein 1a in RNA replication complex assembly and function* PLoS Pathog., **5**:e1000351
Medkova, M., France, Y.E., Coleman, J. and Novick, P. (2006) *The rab exchange factor Sec2p reversibly associates with the exocyst* Mol. Biol. Cell, **17**, 2757-2769
Pawelec, A., Arsić, J. and Kölling, R. (2010) *Mapping of Vps21 and HOPS binding sites in Vps8 and effect of binding site mutants on endocytic trafficking* Eukaryot. Cell, **9**, 602-610
Roberts-Galbraith, R.H., Ohi, M.D., Ballif, B.A., Chen, J-S., et al (2010) *Dephosphorylation of F-BAR protein Cdc15 modulates its conformation and stimulates its scaffolding activity at the cell division site* Mol. Cell, **39**, 86–99
Ruggiano, A., Mora, G., Buxó, L. and Carvalho, P. (2016) *Spatial control of lipid droplet proteins by the ERAD ubiquitin ligase Doa10* EMBO Rep., **17**, 1644-1655
Satyanarayana, C., Schroder-Kohne, S., Craig, E.A., Schu, P.V., et al (2000) *Cytosolic Hsp70s are involved in the transport of aminopeptidase 1 from the cytoplasm into the vacuole* FEBS Lett., **470**, 232-238
Schmitz, C., Kinner, A. and Kölling, R. (2005) *The deubiquitinating enzyme Ubp1 affects sorting of the ATP-binding cassette-transporter Ste6 in the endocytic pathway* Mol. Biol. Cell, **16**, 1319-1329
Schuldiner, M., Metz, J., Schmid, V., Denic, V., Rakwalska, M., et al (2008) *The GET complex mediates insertion of tail-anchored proteins into the ER membrane* Cell, **134**, 634-645
Sciskala, B. and Kölling, R. (2013) *Interaction maps of the Saccharomyces cerevisiae ESCRT-III protein Snf7* Eukaryot. Cell, **12**, 1538–1546
Urbanowski, J.L. and Piper, R.C. (2001) *Ubiquitin sorts proteins into the intralumenal degradative compartment of the late-endosome/vacuole* Traffic, **2**, 622-630
Wang, F., Whynot, A., Tung, M. and Denic, V. (2011) *The mechanism of tail-anchored protein insertion into the ER membrane* Mol. Cell, **43**, 738–750
Wang, X., Lee, W-M., Watanabe, T., Schwartz, M., et al (2005) *Brome mosaic virus 1a nucleoside triphosphatase/helicase domain plays crucial roles in recruiting RNA replication templates* J. Virol., **79**, 13747-13758
Wang, F., Chan, C., Weir, N.R. and Denic, V. (2014) *The Get1/2 transmembrane complex is an endoplasmic-reticulummembrane protein insertase* Nature, **512**, 441-444
Weiss, P., Huppert, S. and Kölling, R. (2009) *Analysis of the dual function of the ESCRT-III protein Snf7 in endocytic trafficking and in gene expression* Biochem. J., **424**, 89–97
Zhang, J., Diaz, A., Mao, L., Ahlquist, P. et al (2012) *Host acyl coenzyme A binding protein regulates replication complex assembly and activity of a positive-strand RNA vrus* J. Virol., **86**, 5110-5121

1a. Additional separation of lipid droplets

Schott, M.B., Rasineni, K., Weller, S.G., Schulze, R.J., Sletten, A.C., Casey, C.A. and McNiven, M.A. (2017) *β-Adrenergic induction of lipolysis in hepatocytes is inhibited by ethanol exposure* J. Biol. Chem., **292**, 11815–11828

Vogt, D.A., Camus, G., Herker, E., Webster, B.R., Tsou, C-L., Greene, W.C., Yen, T-S.B. and Ott, M. (2013) *Lipid droplet-binding protein TIP47 regulates hepatitis C virus RNA replication through interaction with the viral NS5A protein* PLoS Pathog., **9**: e1003302
Ysselstein, D., Dehay, B., Costantino, I.M., McCabe, G.P., Frosch, M.P., George, J.M., Bezard, E. and Rochet, J-C. (2017) *Endosulfine-alpha inhibits membrane induced α-synuclein aggregation and protects against α-synuclein neurotoxicity* Acta Neuropathol. Comm., **5**: 3

2. Subcellular membranes

2.1 Golgi membranes

Fath, K.R. (2005) *Characterization of myosin-II binding to Golgi stacks in vitro* Cell Motil. Cytoskeleton, **60**, 222-235

2.2 Lysosomes/endosomes

Morrison, C., Sauble, E.N., Nguyen, A., La, A., et al (2009) *Potential abnormalities in iron metabolism in hyperlipidemia patient fibroblasts* FASEB J., **23**, Abstr. 105.4
Nguyen, A., Zhao, N., Morrison, C., Gonzalez, A., et al (2009) *Mechanisms of iron release from lysosomes* FASEB J., **23**, Abstr. 921.11

2.3 Vesicles (budded and from permeablized cells)

Joglekar, A.P., Xu, D., Rigotti, D.J., Fairman, R., et al (2003) *The SNARE motif contributes to rbet1 intracellular targeting and dynamics independently of SNARE interactions* J. Biol. Chem., **278**, 14121-14133
Lin, C-C., Love, H.D., Gushue, J.N., Bergeron, J.J.M., et al (1999) *ER/Golgi intermediates acquire Golgi enzymes by Bredelfin A – sensitive retrograde transport in vitro* J. Cell. Biol., **147**, 1457-1472
Love, H.D., Lin, C.C., Short, C.S. and Ostermann, J. (1998) *Isolation of functional Golgi-derived vesicles with a possible role in retrograde transport* J. Cell Biol., **140**, 541-551
Scheiffele, P., Verkade, P., Fra, A.M., Simons, K., et al (1998) *Caveolin-1 and –2 in the exocytic pathway of MDCK cells* J. Cell Biol., **140**, 795-806