

# OptiPrep™ Reference List RS03

## Purification of mitochondria from mammalian sources

- ◆ This **Reference List** provides a complete list of publications reporting the use of OptiPrep™ for the isolation of mitochondria: the references are sorted into sections according cell or tissue type. Within each section references are listed alphabetically according to first author.
- ◆ Key words in the article titles are highlighted in light blue
- ◆ For yeast mitochondria see **Reference List RS15 “Purification of subcellular organelles and membrane compartments from *Saccharomyces cerevisiae* – a bibliography”**
- ◆ Papers covering the purification of organelles from non-mammalian eukaryotes are listed in **Reference List RS14**

### Reference List RS03 is divided into:

**Section A papers:** Analysis primarily of mitochondria, often with additional information on the banding of other organelles (e.g. lysosomes, peroxisomes and ER) from cultured cells (**A1**) and from tissues (**A2**)

**Section B papers:** analysis of mitochondrial interactions and association with the endoplasmic reticulum

## SECTION A

### A1 Mammalian cultured cells

#### Adenocarcinoma cells

**Paterson, J.K.** and Gottesman, M.M. (2007) *P-Glycoprotein is not present in mitochondrial membranes* Exp. Cell Res., **313**, 3100-3105

**Shen, S-M.**, Guo, M., Xiong, Z., Yu, Y., Zhao, X-Y., Zhang, F-F. and Chen, G-Q. (2015) *AIF inhibits tumor metastasis by protecting PTEN from oxidation* EMBO Rep., **16**, 1563–1580

#### Adipocytes

**Den Hartigh, L.J.**, Han, C.Y., Wang, S., Omer, M. and Chait, A. (2013) *10E,12Z-conjugated linoleic acid impairs adipocyte triglyceride storage by enhancing fatty acid oxidation, lipolysis, and mitochondrial reactive oxygen species* J. Lipid Res., **54**, 2964–2978

#### Adrenoleukodystrophy fibroblasts

**Wiesinger, C.**, Kunze, M., Regelsberger, G., Forss-Petter, S. and Berger, J. (2013) *Impaired very long-chain Acyl-CoA  $\beta$ -oxidation in human X-linked adrenoleukodystrophy fibroblasts is a direct consequence of ABCD1 transporter dysfunction* J. Biol. Chem., **288**, 19269-19279

#### C3HA mouse lymphoid cells

**Maia, R.C.**, Culver, C.A. and Laster, S.M. (2006) *Evidence against calcium as a mediator of mitochondrial dysfunction during apoptosis induced by arachidonic acid and other free fatty acids* J. Immunol., **177**, 6398-6404

#### Caco-2 cells

**Bielaszewska, M.**, Ruter, C., Kunsmann, L., Greune, L., Bauwens, A., Zhang, W., Kuczius, T., Kim, K.S., Mellmann, A., Schmidt, M.A. and Karch, H. (2013) *Enterohemorrhagic Escherichia coli hemolysin employs outer membrane vesicles to target mitochondria and cause endothelial and epithelial apoptosis* PloS Pathog., **9**: e1003797

### Carcinoma cells (see also “Colon carcinoma/colorectal cells”)

**Chattopadhyay, S.**, Mukherjee, A., Patra, U., Bhowmick, R., Basak, T., Sengupta, S., Chawla-Sarkar, M. (2017) *Tyrosine phosphorylation modulates mitochondrial chaperonin Hsp60 and delays rotavirus NSP4-mediated apoptotic signaling in host cells* Cell. Microbiol., **19**: e12670

**Maeda, H.**, Nagata, S., Wolfgang, C.D., Brattbauer, C.D., Bera, T.K. and Pastan, I. (2004) *The T cell receptor  $\gamma$  chain alternate reading frame protein (TARP), a prostate-specific protein localized in mitochondria* J. Biol. Chem., **279**, 24561-24568

**Sandin, M.**, Antberg, L., Levander, F. and James, P. (2015) A Breast Cell Atlas: *Organelle analysis of the MDA-MB-231 cell line by density-gradient fractionation using isotopic marking and label-free analysis* EuPA Open Proteomics, **8**, 68–77

**Shen, S-M.**, Guo, M., Xiong, Z., Yu, Y., Zhao, X-Y., Zhang, F-F. and Chen, G-Q. (2015) *AIF inhibits tumor metastasis by protecting PTEN from oxidation* EMBO Rep., **16**, 1563–1580

**Weissleder, R.**, Tung, C-H., Mahmood, U. and Bogdanov, A. (1999) *In vivo imaging of tumors with protease-activated near-infrared fluorescent probes* Nature Biotech., **17**, 375-378

**Zhyvoloup, A.**, Nemazany, I., Panasyuk, G., Valovka, T., Fenton, T., Rebholz, H., Wang, M-L., Foxon, R., Lyzogubov, V. et al (2003) *Subcellular localization and regulation of coenzyme A synthetase* J. Biol. Chem., **278**, 50316-50321

### Cardiac myocytes

**Nguyen, T.**, Ogbi, M. and Johnson, J.A. (2008) *Delta protein kinase C Interacts with the d subunit of the  $F_1F_0$  ATPase in neonatal cardiac myocytes exposed to hypoxia or phorbol ester: implications for  $F_1F_0$  ATPase regulation* J. Biol. Chem., **283**, 29831-29840

**Nguyen, T.T.**, Ogbi, M., Yu, Q., Fishman, J.B., Thomas, W., Harvey, B.J., Fulton, D. Johnson, J.A. (2010) *Modulation of the protein kinase C $\delta$  interaction with the “d” subunit of  $F_1F_0$ -ATP synthase in neonatal cardiac myocytes; development of cell-permeable, mitochondrially targeted inhibitor and facilitator peptides* J. Biol. Chem., **285**, 22164–22173

**Nguyen, T.T.**, Ogbi, M., Yu, Q. and Johnson, J.A. (2010) *Attenuation of the hypoxia-induced protein kinase C $\delta$  interaction with the ‘d’ subunit of  $F_1F_0$ -ATP synthase in neonatal cardiac myocytes: implications for energy preservation and survival* Biochem. J., **429**, 335–345

**Ogbi, M.** and Johnson, J.A. (2006) *Protein kinase C $\epsilon$  interacts with cytochrome c oxidase subunit IV and enhances cytochrome c oxidase activity in neonatal cardiac myocyte preconditioning* Biochem. J., **393**, 191-199

### Colon carcinoma/colorectal cells

**Boohaker, R.J.**, Zhang, G., Carlson, A.L., Nemecek, K.N. and Khaled, A.R. (2011) *BAX supports the mitochondrial network, promoting bioenergetics in nonapoptotic cells* Am. J. Physiol. Cell Physiol. **300**, C1466–C1478

**Dionne, S.**, Levy, E., Levesque D. and Seidman, E.G. (2010) *PPAR $\gamma$  ligand 15-deoxy-delta 12,14-prostaglandin J2 sensitizes human colon carcinoma cells to TWEAK-induced apoptosis* Anticancer Res., **30**, 157-166

**Margineantu, D.H.**, Emerson, C.B., Diaz, D. and Hockenberry, D.M. (2007) *Hsp90 inhibition decreases mitochondrial protein turnover* PLoS ONE, **10**:e1066

**Shen, S-M.**, Guo, M., Xiong, Z., Yu, Y., Zhao, X-Y., Zhang, F-F. and Chen, G-Q. (2015) *AIF inhibits tumor metastasis by protecting PTEN from oxidation* EMBO Rep., **16**, 1563–1580

### COS cells

**Graf, S.A.**, Haigh, S.E., Corson, E.D. and Shirihai, O.S. (2004) *Targeting, import, and dimerization of a mammalian mitochondrial ATP binding cassette (ABC) transporter, ABCB10 (ABC-me)* J. Biol. Chem., **279**, 42954-42963

**Li, C-C.**, Wu, T-S., Huang, C-F., Jang, L-T., Liu, Y-T., You, S-T., Liou, G-G., Lee, F-J.S. (2012) *GTP-binding-defective ARL4D alters mitochondrial morphology and membrane potential* PloS One, **7**: e43552

**Seyrantepe, V.**, Landry, K., Trudel, S., Hassan, J.A., Morales, C.R. and Pshzhetsky, A.V. (2004) *Neu4, a novel human lysosomal lumen sialidase, confers normal phenotype to sialidosis and galactosialidosis cells* J. Biol. Chem., **279**, 37021-37029

### Fibrosarcoma cells (human)

**Zhao, H.**, Ruberu, K., Li, H. and Garner, B. (2013) *Analysis of subcellular [ $^{57}\text{Co}$ ] cobalamin distribution in SH-SY5Y neurons and brain tissue* J. Neurosci. Methods, **217**, 67– 74

### HEK cells

- Bhowmick, R.**, Halder, U.C., Chattopadhyay, S., Chanda, S., Nandi, S., Bagchi, P., Nayak, M.K., Chakrabarti, O., Kobayashi, N. and Chawla-Sarkar, M. (2012) *Rotaviral enterotoxin nonstructural protein 4 targets mitochondria for activation of apoptosis during infection* J. Biol. Chem., **287**, 35004–35020
- Chen, Y.**, Feng, R., Luo, G., Guo, J., Wang, Y., Sun, Y., Zheng, L. and Wen, T. (2018) *DCF1 subcellular localization and its function in mitochondria* Biochimie, **144**, 50-55
- Choi, Y-S.**, Ryu, B-K., Min, H-K., Lee, S-W. and Pak, Y.K. (2005) *Analysis of proteome bound to D-loop region of mitochondrial DNA by DNA-linked affinity chromatography and reverse-phase liquid chromatography/tandem mass spectrometry* Ann. N.Y. Acad. Sci., **1042**, 88-100
- Choi, Y.B.**, Sandford, G. and Nicholas, J. (2012) *Human herpesvirus 8 interferon regulatory factor-mediated BH3-only protein inhibition via Bid BH3-B mimicry* PLoS Pathog., **8**: e1002748
- Chou, C-H.**, Lee, R-S., Yang-Yen, H-F. (2006) *An internal EELD domain facilitates mitochondrial targeting of Mcl-1 via a Tom70-dependent pathway* Mol. Biol. Cell, **17**, 3952-3963
- Gerhold, J.M.**, Cansiz-Arda, S., Löhmus, M., Engberg, O., Reyes, A., van Rennes, H., Sanz, A., Holt, I.J., Cooper, H.M. and Spelbrink, J.N. (2015) *Human mitochondrial DNA-protein complexes attach to a cholesterol-rich membrane structure* Sci. Rep., **5**: 15292
- Durigon, R.**, Mitchell, A.L., Jones, A.W.E., Manole, A., Mennuni, M., Hirst, E.M.A., Houlden, H., Maragni, G., Lattante, S. et al (2018) *LETMI couples mitochondrial DNA metabolism and nutrient preference* EMBO Mol. Med., **10**: e8550
- Huang, J.**, Liu, P. and Wang, G. (2018) *Regulation of mitochondrion-associated cytosolic ribosomes by mammalian mitochondrial ribonuclease T2 (RNASET2)* J. Biol. Chem., **293**, 19633–19644
- Kobuchi, H.**, Moriya, K., Ogino, T., Fujita, H., Inoue, K., Shuin, T., Yasuda, T., Utsumi, K. and Utsumi, T. (2012) *Mitochondrial localization of ABC transporter ABCG2 and its function in 5-aminolevulinic acid-mediated protoporphyrin IX accumulation* PLoS One, **7**: e50082
- Landry, M-C.**, Champagne, C., Boulanger, M-C., Jetté, A., Fuchs, M., Dziengelewski, D. and Lavoie, J.N. (2014) *A functional interplay between the small GTPase Rab11a and mitochondria-shaping proteins regulates mitochondrial positioning and polarization of the actin cytoskeleton downstream of Src family kinases* J. Biol. Chem., **289**, 2230–2249
- Lu, M-Y.** and Liao, F. (2011) *Interferon-stimulated gene ISG12b2 is localized to the inner mitochondrial membrane and mediates virus-induced cell death* Cell Death Differ., **18**, 925–936
- Luo, G.**, Sun, Y., Feng, R., Zhao, Q. and Wen, T. (2018) *ARL3 subcellular localization and its suspected role in autophagy* Biochimie, **154**, 187-193
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- Rumlová, M.**, Křížová, I., Keprová, A., Hadravová, R., Doležal, M., Strohalmová, K., Pichová, I., Hájek, M. and Ruml, T. (2014) *HIV-1 protease-induced apoptosis* Retrovirology, **11**: 37
- Shneyer, B.I.**, Ušaj, M. and Henn, A. (2016) *Myo19 is an outer mitochondrial membrane motor and effector of starvation-induced filopodia* J. Cell Sci., **129**, 543-556
- Witkowski, A.**, Thweatt, J. and Smith, S. (2011) *Mammalian ACSF3 protein is a malonyl-CoA synthetase that supplies the chain extender units for mitochondrial fatty acid synthesis* J. Biol. Chem., **286**, 33729–33736

### HeLa cells

- Alonzo, J.R.**, Venkataraman, C., Field, M.S. and Stover, P.J. (2018) *The mitochondrial inner membrane protein MPV17 prevents uracil accumulation in mitochondrial DNA* J. Biol. Chem., **293**, 20285–20294
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- Costa, D.**, Costa, C., Caldeira, M., Cortes, L., Queiroz, J.A. and Cruz, C. (2017) *Targeting of cellular organelles by fluorescent plasmid DNA nanoparticles* Biomacromolecules, **18**, 2928–2936
- Huang, C-R.** and Yang-Yen, H-F. (2010) *The fast-mobility isoform of mouse Mcl-1 is a mitochondrial matrix-localized protein with attenuated anti-apoptotic activity* FEBS Lett., **584**, 3323–3330
- Liu, P.**, Huang, J., Zheng, Q., Xie, L., Lu, X., Jin, J. and Wang, G. (2017) *Mammalian mitochondrial RNAs are degraded in the mitochondrial intermembrane space by RNASET2* Protein Cell, **8**, 735–749
- Tanaka, K.**, Sugiura, Y., Ichishita, R., Mihara, K. and Oka, T. (2011) *KLP6: a newly identified kinesin that regulates the morphology and transport of mitochondria in neuronal cells* J. Cell Sci., **124**, 2457-2465

### Hepatocytes, hepatoma cells and hepatocarcinoma cells

- Beauchamp, E.**, Tekpli, X., Marteil, G., Lagadic-Gossmann, D., Legrand, P. and Rioux, V. (2009) *N-Myristoylation targets dihydroceramide D4-desaturase 1 to mitochondria: Partial involvement in the apoptotic effect of myristic acid* Biochimie **91**, 1411–1419

- Bhattacharyya, S.**, Feferman, L. and Tobacman, J.K. (2016) *Restriction of aerobic metabolism by acquired or innate arylsulfatase B deficiency: a new approach to the Warburg effect* Sci. Rep., **6**: 32885
- Cheng, M-L.**, Chi, L-M., Wu, P-R. and Ho, H-Y. (2016) *Dehydroepiandrosterone-induced changes in mitochondrial proteins contribute to phenotypic alterations in hepatoma cells* Biochem.Pharmacol., **117**, 20-34
- Fantappi, O.**, Sassoli, C., Tani, A., Nosi, D., Marchetti, S., Formigli, L. and Mazzanti, R. (2015) *Mitochondria of a human multidrug-resistant hepatocellular carcinoma cell line constitutively express inducible nitric oxide synthase in the inner membrane* J. Cell. Mol. Med., **19**, 1410-1417
- Matsumoto, A.**, Comatas, K.E., Liu, L. and Stamler, J.S. (2003) *Screening for nitric oxide-dependent protein-protein interactions* Science, **301**, 657-661
- Sultan, A.S.**, Miyoshi, E., Ihara, Y., Nishikawa, A., Tsukada, Y. and Taniguchi, N. (1997) *Bisecting GlcNAc structures act as negative sorting signals for cell surface glycoproteins in forskolin-treated rat hepatoma cells* J. Biol. Chem., **272**, 2866-2872
- Tekpli, X.**, Rivedal, E., Gorria, M., Landvik, N.E., Rissel, M., Dimanche-Boitrel, M-T., Baffet, G., Holme, J.A. and Lagadic-Gossmann, D. (2010) *The B[a]P-increased intercellular communication via translocation of connexin-43 into gap junctions reduces apoptosis* Toxicol. Appl. Pharmacol., **242**, 231–240

### Hippocampal cells

- Guan, D-F.**, Ren, P-Y., Hu, W. and Zhang, Y-L. (2015) *The mGluR5 positive allosteric modulator CDPBB inhibits SO<sub>2</sub>-induced protein radical formation and mitochondrial dysfunction through activation of Akt in mouse hippocampal HT22 cells* Cell. Mol. Neurobiol., **35**, 573–583

### Human breast cancer cells

- Kim, H.M.**, Kim, C-S., Lee, J-H., Jang, S.J., Hwang, J.J., Ro, S. and Choi, J. (2013) *CG0009, a novel glycogen synthase kinase 3 inhibitor, induces cell death through cyclin D1 depletion in breast cancer cells* PLoS One, **8**: e60383

### Human fibroblasts

- Beltran, P.M.J.**, Mathias, R.A. and Cristea, I.M. (2016) *A portrait of the human organelle proteome in space and time during cytomegalovirus infection* Cell Systems **3**, 361–373
- Mathias, R.A.**, Greco, T.M., Oberstein, A., Budayeva, H.G., Chakrabarti, R., Rowland, E.A., Kang, Y., Shenk, T. and Cristea, I.M. (2014) *Sirtuin 4 is a lipoamidase regulating pyruvate dehydrogenase complex activity* Cell, **159**, 1615–1625
- Mathias, R.A.**, Greco, T.M. and Cristea, I.M. (2016) *Identification of sirtuin4 (SIRT4) protein interactions: uncovering candidate acyl-modified mitochondrial substrates and enzymatic regulators* In Histone Deacetylases: Methods and Protocols: Methods Mol. Biol., **1436** (ed. Sarkar, S.), Springer Science+Business Media, LLC, pp 213-239
- Mathias, R.A.**, Greco, T.M. and Cristea, I.M. (2016) *Identification of sirtuin4 (SIRT4) protein interactions: uncovering candidate acyl-modified mitochondrial substrates and enzymatic regulators* In Histone Deacetylases: Methods and Protocols: Methods Mol. Biol., **1436** (ed. Sarkar, S.), Springer Science+Business Media, LLC, pp 213-239

### Human glioblastoma cells

- Paterson, J.K.**, Shukla, S., Black, C.M., Tachiwada, T., Garfield, S., Wincovitch, S., Ernst, D.N., Agadir, A., Li, X., Ambudkar, S.V., Szakacs, G., Akiyama, S-i. and Gottesman, M.M. (2007) *Human ABCB6 localizes to both the outer mitochondrial membrane and the plasma membrane* Biochemistry, **46**, 9443-9452

### Leukocytic/lymphoid cells/lymphocytes

- Choi, Y.B.** and Harhaj, E.W. (2014) *HTLV-1 tax stabilizes MCL-1 via TRAF6-dependent K63-linked polyubiquitination to promote cell survival and transformation* PLoS Pathog., **10**: e1004458
- Ebsen, H.**, Lettau, M., Kabelitz, D. and Janssen, O. (2015) *Subcellular localization and activation of ADAM proteases in the context of FasL shedding in T lymphocytes* Mol. Immunol., **65**, 416–428
- Hall, S.L.**, Hester, S., Griffin, J.L., Lilley, K.S. and Jackson, A.P. (2009) *The organelle proteome of the DT40 lymphocyte cell line* Mol.Cell. Proteom., **8**, 1295–1305
- Hwang, K.Y.** and Choi, Y.B. (2016) *Modulation of mitochondrial antiviral signaling by human herpesvirus 8 interferon regulatory factor 1* J. Virol., **90**, 506-520
- Kang, R.**, Tang, D., Yu, Y., Wang, Z., Hu, T., Wang, H. and Cao, L. (2010) *WAVE1 regulates Bcl-2 localization and phosphorylation in leukemia cells* Leukemia, **24**, 177–18
- Liang, P.**, Nair, J.R., Song, L., McGuire, J.J. and Dolnick, B.J. (2005) *Comparative genomic analysis reveals a novel mitochondrial isoform of human rTS protein and unusual phylogenetic distribution of the rTS gene* BMC Genomics, **6**:125

**Schmidt, H.**, Gelhaus, C., Nebendahl, M., Lettau, M., Wartzl, C., Kabelitz, D., Leippe, M. and Janssen, O. (2008) *2-D DIGE analyses of enriched secretory lysosomes reveal heterogeneous profiles of functionally relevant proteins in leukemic and activated human NK cells* Proteomics, **8**, 2911-2925

**Schmidt, H.**, Gelhaus, C., Lucius, R., Nebendahl, M., Leippe, M. and Janssen, O. (2009) *Enrichment and analysis of secretory lysosomes from lymphocyte populations* BMC Immunol., **10**:41

**Schmidt, H.**, Gelhaus, C., Nebendahl, M., Lettau, M., Lucius, R., Leippe, M., Kabelitz, D. and Janssen, O. (2011) *Effector granules in human T lymphocytes: proteomic evidence for two distinct species of cytotoxic effector vesicles* J. Proteome Res., **10**, 1603–1620

**Smith, C.G.**, Kharkwal, H. and Wilson, D.W. (2017) *Expression and subcellular localization of the Kaposi's sarcoma-associated herpesvirus K15P protein during latency and lytic reactivation in primary effusion lymphoma* Cells J. Virol., **91**: e01370-17

### Lung epithelial cells

**Estrella, M.A.**, Du, J., Chen, L., Rath, S., Prangle, E., Chitrakar, A., Aoki, T., Schedl, P., Rabinowitz, J. and Korennykh, A. (2019) *The metabolites NADP<sup>+</sup> and NADPH are the targets of the circadian protein Nocturnin (Curled)* Nat. Comm., **10**: 2367

### Macrophages

**Andreyev, A.Y.**, Shen, Z., Guan, Z., Ryan, A., Fahy, E., Subramaniam, S., Raetz, C.R.H., Briggs, S. and Dennis, E.A. (2010) *Application of proteomic marker ensembles to subcellular organelle identification* Mol. Cell. Proteomics, **9**, 388–402

**Andreyev, A.Y.**, Fahy, E., Guan, Z., Kelly, S., Li, X., McDonald, J.G., Milne, S., Myers, D., Park, H., Ryan, A., Thompson, B.M. et al (2010) *Subcellular organelle lipidomics in TLR-4-activated macrophages* J. Lipid Res., **51**, 2785–2797

**DiMezzo, T.L.**, Ruthel, G., Brueggemann, E.E., Hines, H.B., Ribot, W.J., Chapman, C.E., Powell, B.S. and Welkos, S.L. (2009) *In vitro intracellular trafficking of virulence antigen during infection by Yersinia pestis* PLoS One, **4**:e6281

**Kassas, N.**, Tanguy, E., Thahouly, T., Fouillen, L., Heintz, D., Chasserot-Golaz, S., Bader, M-F., Grant, N.J. and Vitale, N. (2017) *Comparative characterization of phosphatidic acid sensors and their localization during frustrated phagocytosis* J. Biol. Chem., **292**, 4266–4279

### Mammary cells

**Glunde, K.**, Guggino, S.E., Ichikawa, Y. and Bhujwalla, Z.M. (2003) *A novel method of imaging lysosomes in living human mammary epithelial cells* Mol. Imaging, **2**, 24-36

**Zhyvoloup, A.**, Nemazanyy, I., Panasyuk, G., Valovka, T., Fenton, T., Rebholz, H., Wang, M-L., Foxon, R., Lyzogubov, V. et al (2003) *Subcellular localization and regulation of coenzyme A synthetase* J. Biol. Chem., **278**, 50316-50321

### MDCK cells

**Solazzo, M.**, Fantappiè, O., D'Amico, M., Sassoli, C., Tani, A., Cipriani, G., Bogani, C., Formigli, L. and Mazzanti, R. (2009) *Mitochondrial expression and functional activity of breast cancer resistance protein in different multiple drug-resistant cell lines* Cancer Res., **69**, 7235-7242

### Microvascular endothelial cells

**Bielaszewska, M.**, Ruter, C., Kunsmann, L., Greune, L., Bauwens, A., Zhang, W., Kuczus, T., Kim, K.S., Mellmann, A., Schmidt, M.A. and Karch, H. (2013) *Enterohemorrhagic Escherichia coli hemolysin employs outer membrane vesicles to target mitochondria and cause endothelial and epithelial apoptosis* PLoS Pathog., **9**: e1003797

### Monkey kidney cells

**Bhowmick, R.**, Halder, U.C., Chattopadhyay, S., Chanda, S., Nandi, S., Bagchi, P., Nayak, M.K., Chakrabarti, O., Kobayashi, N. and Chawla-Sarkar, M. (2012) *Rotaviral enterotoxin nonstructural protein 4 targets mitochondria for activation of apoptosis during infection* J. Biol. Chem., **287**, 35004–35020

**Mukherjee, A.**, Patra, U., Bhowmick, R. and Chawla-Sarkar, M. (2018) *Rotaviral nonstructural protein 4 triggers dynamin - related protein 1 - dependent mitochondrial fragmentation during infection* Cell. Microbiol., **20**: e12831

### Mouse/mouse embryo fibroblasts

**Bär, S.**, Daeffler, L., Rommelaere, J. and Nüesch, J.P.F. (2008) *Vesicular egress of non-enveloped lytic parvoviruses depends on gelsolin functioning* PLoS Pathog., **4**:e1000126

**Choi, Y.B.**, Shembade, N., Parvatiyar, K., Balachandran, S. and Harhaja, E.W. (2017) *TAX1BP1 restrains virus-induced apoptosis by facilitating itch-mediated degradation of the mitochondrial adaptor MAVS* Mol. Cell. Biol., **37**: e00422-16

**Kim, Y.**, Kim, C., Kwon, O.Y., Nam, D., Kim, S.S., Park, J.H., Kim, S., Gallagher-Jones, M. et al (2017) *Visualization of a mammalian mitochondrion by coherent X-ray diffractive imaging* Sci. Rep., **7**: 1850

**Pandey, S.**, Talukdar, I., Jain, B.P. and Goswami, S.K. (2017) *GSK3 $\beta$  and ERK regulate the expression of 78 kDa SG2NA and ectopic modulation of its level affects phases of cell cycle* Sci. Rep., **7**: 7555

**Wang, H-Q.**, Nakaya, Y., Du, Z., Yamane, T., Shirane, M., Kudo, T., Takeda, M., Takebayashi, K., Noda, Y., Nakayama, K.I. and Nishimura, M. (2005) *Interaction of presenilins with FKBP38 promotes apoptosis by reducing mitochondrial Bcl-2* Hum. Mol. Genet., **14**, 1889-1902

### Myeloid leukaemic cells

**Yun, Y.**, Wang, L-S., Shen, S-M., Xia, L., Zhang, L., Zhu, Y-S. and Chen, G-Q. (2007) *Subcellular proteome analysis of camptothecin analogue NSC606985-treated acute myeloid leukemic cells* J. Proteome Res., **6**, 3808-3818

### Neuroblastoma/glioma cells

**Greeve, I.**, Hermans-Borgmeyer, I., Brellinger, C., Kasper, D., Gomez-Isla, T., Behl, C., Levkau, B. and Nitsch, R.M. (2000) *The human DIMINUTO/DWARF1 homolog seladin-1 confers resistance to Alzheimer's disease-associated neurodegeneration and oxidative stress* J. Neurosci., **20**, 7345-7352

**Sharer, J.D.**, Shern, J.S., Van Valkenburg, H., Wallace, D.C. and Kahn, R.A. (2002) *ARL2 and BART enter mitochondria and bind the adenine nucleotide transporter* Mol. Biol. Cell, **13**, 71-83

**Tibaldi, E.**, Brunati, A.M., Massimino, M.L., Stringaro, A., Colone, M., Agostinelli, E., Arancia, G. and Toninello, A. (2008) *Src-Tyrosine kinases are major agents in mitochondrial tyrosine phosphorylation* J. Cell. Biochem., **104**, 840-849

**Zhao, H.**, Ruberu, K., Li, H. and Garner, B. (2013) *Analysis of subcellular [<sup>57</sup>Co] cobalamin distribution in SH-SY5Y neurons and brain tissue* J. Neurosci. Methods, **217**, 67– 74

### Neuronal cells

**Zhao, H.**, Ruberu, K., Li, H. and Garner, B. (2013) *Analysis of subcellular [<sup>57</sup>Co] cobalamin distribution in SH-SY5Y neurons and brain tissue* J. Neurosci. Methods, **217**, 67– 74

### NRK cells

**Wang, C.**, Du, W., Su, Q.P., Zhu, M., Feng, P., Li, Y., Zhou, Y., Mi, N., Zhu, Y. et al (2015) *Dynamic tubulation of mitochondria drives mitochondrial network formation* Cell Res., **25**, 108-1120

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## SECTION B

### Mitochondrial-associated membranes; interactions with the endoplasmic reticulum/Golgi

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