Resolution of soluble cytosolic proteins from membrane vesicles and organelles: a bibliography

There are three Application Sheets listed in the Application Sheet Index under “Protein localization (membrane versus cytosol)” which describe different gradient strategies; they can be found on the OptiPrep™ Applications flash drive or accessed via the following website www.axis-shield-density-gradient-media.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 Mini-Reviews addressing the resolution of mammalian cell exosomes and other microvesicles from soluble proteins are covered in OptiPrep™ Mini-Review MS13 and the similar resolution of bacterial and fungal microvesicles in OptiPrep™ Mini-Review MS14.

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. 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. In some cases gradients also resolve lipid droplets.

♦ Key words in titles are highlighted in light blue.

1. Cells or tissues
1.1. Algae

1.2. Bacteria

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

1.4. Carcinoma cells
**1.5. CHO cells**


**1.6. COS cells**


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**


**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


1.9. Hepatocytes

1.10. Hepatoma cells

1.11. Insect cells

1.12. Jurkat cells

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

1.14. Liver
1.15 Lung cells

1.16 MDCK cells

1.17. Monkey kidney cells

1.18. Mouse embryo fibroblasts

1.19. Neuroblastoma cells


1.20. NRK cells


1.21 Pheochromocytoma (PC12) cells

1.22 Plant cells

1.23 Squid axons


1.24 Vero cells


1.25 Xenopus

1.26 Yeast


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


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


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


2. Subcellular membranes

2.1 Golgi membranes


2.2 Lysosomes/endosomes


2.3 Vesicles (budded and from permeablized cells)


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