

Electrospray MS of detergent-solubilised membrane proteins

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based on:

Whitelegge JP, le Coutre J, Lee JC, Engel CK, Prive GG, Faull KF, Kaback HR, "Toward the bilayer proteome, electrospray ionization-mass spectrometry of large, intact transmembrane proteins", Proc Natl Acad Sci U S A. **96**, 10695-8 (1999).

protein: 10 mg/ml in TEN200, 0.05 % DDM (as little salt/detergent as possible)

- 10 μ l protein solution + 90 μ l water
- add 300 μ l methanol, mix
- add 100 μ l chloroform. mix
- add 200 μ l water, mix vigorously
- centrifuge 2 min 10.000x g
- take top phase off (~ 500 μ l), protein forms precipitated layer
- add 300 μ l methanol
- centrifuged 1 min 16.000x g, take supernatant off
- dry pellet

- for ESMS, take up pellet in 100 μ l 50% methanol, 1% formic acid.
- 1 min 16.000 xg
- injected supernatant into MS.

- (alternatively, the pellet may be re-suspended in 10% formic acid and then diluted with 50% methanol, 1% formic acid for injection)

July 2007