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| **Currently Planned Experiments (5.25.2017)** | **Time needed** | **Scientists** |
| **OAADPr Expt.**  (4a) 600uM MnSOD, 100uM NAD+, 200 uM HKL, 100uM NAM, 0uM OAADPr  (4b) 600uM MnSOD, 100uM NAD+, 200 uM HKL, 100uM NAM, 2.5uM OAADPr  (1a) 600uM MnSOD, 100uM NAD+, 0 uM HKL, 0uM NAM, 0uM OAADPr  (1b) 600uM MnSOD, 100uM NAD+, 0 uM HKL, 0uM NAM, 2.5uM OAADPr  Time point = 0, 10, 30, 40, 80, 120min  In-house Sirt3 = 5U, **XG Batch I**  Total reaction = 14 reactions  **Note: 4a and 4b are the priorities. 1a and 1b samples can be prepared first and only run 0, 10, 30 time point. The rest of the samples of higher time points will be stored in the -80oC till use if needed.** | 2.5 days to complete experiments  0.5 day to prepare report | AU  1 HPLC |
| **2xE0 Expt.**  [K122] = 600 uM  [NAD] = 100 uM  [NAM]= 200 uM  [HKL]= 0 uM  Time points = 0, 10, 30, 40, 80, 120 min  [In-house Sirt3] = 5U and 10U, **XG Batch I**  Total reaction = 5 x 2 = 10 reactions | 2 days to complete experiments  0.5 day to prepare report | SM  1 HPLC |
| **Dose response Expt.-Step 2**  [MnSOD] = 600uM  [NAD+] = 100uM  [NAM] = 100uM  [HKL] = 50, 100, 200 uM  Time point = 0, 10 min  [In-house Sirt3] = 5U, **SM Batch 8+9**  Duplicate  Total reaction = 3 x 2 = 6 reactions | 2 day to complete experiments  0.5 day to prepare report | AU  1 HPLC |
| **FdL high NAD Expt.**  [FdL2 peptide]=250 uM  [NAD+] = 10000, 12500, 15000, 20000 uM (10XKm~950)  [NAM]=0 uM  [HKL]=0 uM  %DMSO=5%  Time point=0, 10, 30, 40, 80, 120min  In-house Sirt3 = 5U, **XG Batch I**  Total reaction = 4x6= 24 reactions | 1 day to complete experiments  0.5 day to prepare report | XG  TeCan |
| **FdL high NAD Expt.**  [FdL2 peptide]=250 uM  [NAD+] = 10000, 12500, 15000, 20000 uM (10XKm~950)  [NAM]=0 uM  [HKL]=0 uM  %DMSO=5%  Time point=0, 10, 30, 40, 80, 120min  In-house Sirt3 = 5U, **XG Batch I**  Total reaction = 4x5+10 = 30 reactions  (high [NAD+] needs extra 1 wash between every 2 runs) | 4 days to complete experiments  0.5 day to prepare report | XG  Old HPLC |
| **FdL high NAM Expt.**  [FdL2 peptide]=250 uM  [NAD+] =obtain from Step I  [NAM]=0, 5000, 7000, 12000, 15000 uM  [HKL]=0, 200 uM  %DMSO-5%  Time point=0, 10, 30, 40, 80, 120min  In-house Sirt3 = 5U, **XG Batch I**  Total reaction = 4x5x2+20 = 60 reactions  (high [NAD+] needs extra 1 wash between every 2 runs) | 7 days to complete experiments  0.5 day to prepare report | XG  Old HPLC |