

Fig. S7. Representative SILAC quintuplet showing a strong signal down-regulation. **A.** Full scan MS of the triply charged (z=3) peptide IADPEHDHTGFLTEpYVATR from Mitogen-activated protein kinase 3 (MAPK3) phosphorylated on Tyr204. Even for a strong intensity decrease of SM2-5 isotopologues, a clear signal was recorded. **B.** Extracted ion chromatograms (EICs) of each SM1-5 isotopologue (only the monoisotopic peaks were used). Signal-to-noise ratio (S/N) for each peak at  $t_R$ =47.6 min (after integration) is indicated.