Supporting Information

Recruiting a Silent Partner for Activation of the Protein Kinase SRPK1

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Supplementary Figure S1: MALDI-TOF spectra of SR protein substrates in the absence and presence of SRPK1 and ATP. MALDI-TOF analyses were carried out using a PerSeptive Biosystems Voyager DE PRO spectrometer. Phosphorylated protein samples were obtained using 300 nM SRPK1 and 1 μM SR protein in 50mM Tris-HCL (pH 7.4), 10mM free Mg^{2+}, 1mM DTT at room temperature. Reactions were initiated with the addition of 1 mM ATP in a total volume of 100 μL. Reactions then were quenched with 5% acetic acid, desalted with Zip-tip C_{18} and eluted with 80% acetonitrile, 2%acetic acid. Unphosphorylated sample controls were prepared in the same manner, without ATP. The matrix solution consisted of 5 mg/ml α-cyano-4-hydroxy cinnamic acid in 1:1:1 acetonitrile, ethanol, 0.52% TFA. Final pH of the matrix solution was 2.0. The net changes in observed molecular weights in the absence and presence of ATP and the corresponding number of sites are displayed above each spectra.

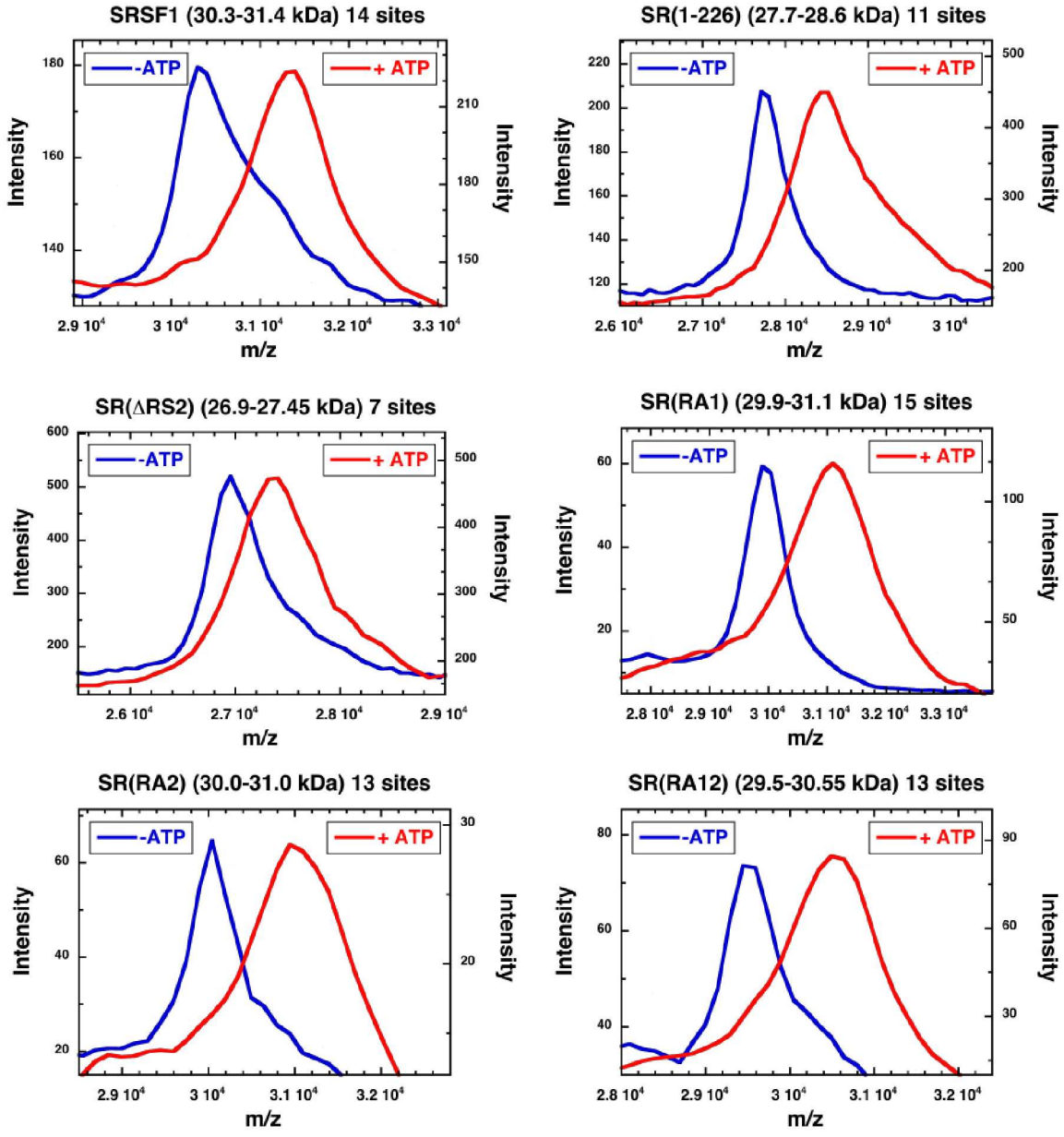
SRSF1 (30.3-31.4 kDa) 14 sites
SR(1-226) (27.7-28.6 kDa) 11 sites
SR(ΔRS2) (26.9-27.45 kDa) 7 sites
SR(RA1) (29.9-31.1 kDa) 15 sites
SR(RA2) (30.0-31.0 kDa) 13 sites
SR(RA12) (29.5-30.55 kDa) 13 sites
-ATP
+ ATP
Intensity
m/z

Figure S1