



Figure S1. Identification of isopentenyladenosine-5'-monophosphate (iPRMP) in immunopurified nucleotide fractions of media of *Physcomitrella patens* CKX-overexpressing mutants (tCKX7; day 0) cultures by capillary liquid chromatography-Q-ToF mass spectrometry (MS). Accurate masses were calculated and used for determination of the compound's elementary composition. (A) MS spectra of natural iPRMP; Ions originating from intact iPRMP were recorded in the positive ion channel at m/z 416, (B) (+)ESI-MS-chromatograms of immunopurified samples pretreated with alkaline phosphatase showed a peak at m/z 336, with a retention time of 24.8 min, corresponding to the quasi-molecular ion of iPR and (C) MS spectrum of iPR obtained by alkaline phosphatase treatment of the cytokinin nucleotide fraction. The identity of IPRMP was strongly supported by exact mass determination with Δ 1.2 ppm fidelity.