

**S3 Table. SIRIN4s PTMs *in vitro*.**

Protein	Site	Ac Z3/CA	Phos	
SIRIN4_1	S88	Z3		
	T128	Z3		
	S153	Z3		
	K167	1.4		
	S188			+
	S207	1.4		
	K248	Z3		
SIRIN4_2	T18		+	
	K34	2		
	S144		+	
	S180		+	
	T185		+	
	K210	3		
SIRIN4_3	K48	Z3		
	K114	Z3		
	S213			+
	T239			+
	T276			+
	S284			+

PTMs were determined using purified recombinant SIRIN4s after *in vitro* <sup>13</sup>C-acetylation by HopZ3/HopZ3\_C300A. Numbers indicate enrichment (fold change) of <sup>13</sup>C-acetylation in the presence of HopZ3 vs. HopZ3\_C300A. Z3: acetylation found only in SIRIN4 treated with HopZ3. **Red shading:** significant (>50%) increase of modification with HopZ3. + indicates phosphorylation found in a recombinant protein. Ac: acetylation; Phos: phosphorylation.