**Table S1.** Intermolecular and intramolecular crosslinks observed from CXMS analysis.

|  |  |  |
| --- | --- | --- |
| Intermolecular interactions | | |
| Atg101 | Atg13 | Distance (Å) |
| 14 | 199 | 24.3 |
| 14 | 196 | 20.3 |
| 91 | 172 | 23 |
| Intramolecular interactions | | |
| Atg13 | Atg13 | Distance (Å) |
| 39 | 96 | 21.9 |
| 96 | 105 | 14.4 |
| 196 | 261 | 19.9 |
| 39 | 76 | 12.1 |
| 39 | 172 | 16.3 |
| 194 | 199 | 6.9 |
| 73 | 96 | 16.6 |
| Atg101 | Atg101 | Distance (Å) |
| 14 | 92 | 36.7 |

**Table S2.** List of *S. cerevisiae* strains used.

|  |  |  |
| --- | --- | --- |
| **Name** | **Genotype** | **Reference** |
| WLY176 | MATα *leu2-3,112 ura3-52 his3-Δ200 trp1-Δ901 suc2-Δ9 lys2-801 GAL pho13∆ pho8∆60* | 32 |
| XLY134 | WLY176 *atg17∆::KANMX6* | 14 |
| XLY159 | WLY176 *atg17∆::KANMX6 ATG31-PA* | This study |
| XLY160 | WLY176 *atg29∆::HIS3 atg31∆::KANMX6* | This study |