**Supplementary File 2**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **position** | | | | | | | | | |
|  | -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| **ubiquitin** | D | G | R | T | L | S | D | Y | N | I |
| Vhs1 | M (6.4) | R (2.1) | R (11.1) | S (3.1)  T (2.7)  R (2.0) | -- | S (11.1)  T (8.9) | -- | S (2.7)  T (2.0) | -- | -- |
| Gin4 | L (2.0) | R (2.7)  K (2.4) | R (9.9) | S (7.9) | M (2.9) | S (14.5)  T (7.5) | M (2.6) | W (2.4)  Y (2.2) | N (2.8) | L (3.9)  I (2.3) |
| Kcc4 | Y (2.0) | R (2.4)  K (2.3) | R (7.6) | S (3.9)  T (2.1) | -- | S (17)  T (5) | -- | C (2.7)  I (2.6) | N (2.4) | L (2.4) |