**Figure S1**

**Panel A**

- **CEN PD55 URA**
  - *pds5Δ*
  - *pds5Δ elg1Δ*
  - -Ura
  - +5-FOA

**Panel B**

- *pds5Δ+CEN Pds5 Ura3*
  - Empty vector
  - *Mox2-2u*
  - *mks1Δ K84A210QR/2u*
  - *mks1Δ K84A210BR/2u*
  - *mks1Δ K84A210QR/2u*
  - *Mks1 K84A210BR/2u*
  - *Mks1 K84A210QR/2u*
  - *Mks1 K84A210BR/2u*
  - *Mks1 K84A210QR/2u*

- *pds5Δ elg1Δ+CEN Pds5 Ura3*
  - Empty vector
  - *Mox2-2u*
  - *mks1Δ K84A210QR/2u*
  - *mks1Δ K84A210BR/2u*
  - *mks1Δ K84A210QR/2u*
  - *Mks1 K84A210BR/2u*
  - *Mks1 K84A210QR/2u*
  - *Mks1 K84A210BR/2u*
  - *Mks1 K84A210QR/2u*

- Mcd1
- Actin

**Panel C**

| GENE NAME | Mutation | No. of times mutation appeared |
|-----------|----------|-------------------------------|
| CLN2      | Ser 316  | 2x                            |
| CLN2      | Arg 100  | 2x                            |
| CLN2      | Gly 132  | 2x                            |
| CLN2      | Ile 186  | 2x                            |
| CLN2      | Lys 225  | 2x                            |
| CLN2      | Asp 273  | 3x                            |
| CLN2      | Ile 94 leu, His 97 fs (frame shift) | 1x |
| CLN2      | Arg 9 fs (frame shift) | 2x |
| CLN2      | Gly 132 fs (frame shift) | 3x |
| CLN2      | Ty insertion | 1x |
| CLN2      | Pro 470 fs (frame shift) | 1x |