

## Supplementary Data

**Table 1: List of oligonucleotides used in this study**

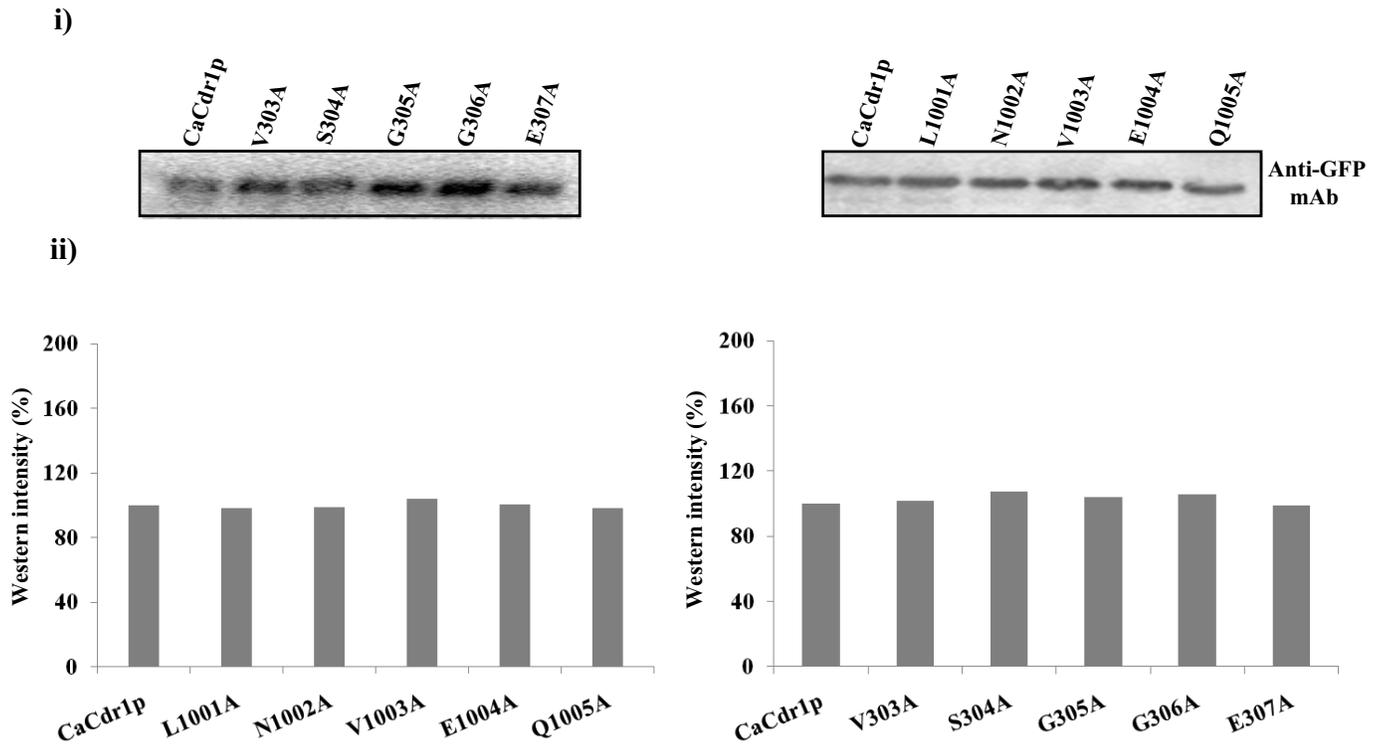
| Primer   | Sequence   |
|--|--|
| <b><i>NBD1 Signature region Oligonucleotides</i></b> |  |
| V303A (F)  | 5' AT TTT GTC CGT GGT GCT TCC GGT GGT GAA AG 3'          |
| V303A (R)  | 5' CTT TCA CCA CCG GAA GCA CCA CGG ACA AAA T 3'          |
| S304A (F)  | 5' TT GTC CGT GGT GTT GCC GGT GGT GAA AGA AAA AG 3'      |
| S304A (R)  | 5' CTT TTT CTT TCA CCA CCG GCA ACA CCA CGG ACA A 3'      |
| G305A (F)  | 5' GTC CGT GGT GTT TCC GCT GGT GAA AGA AAA AG 3'         |
| G304A (R)  | 5' CTT TTT CTT TCA CCA GCG GAA ACA CCA CGG AC 3'         |
| G306A (F)  | 5' CGT GGT GTT TCC GGT GCT GAA AGA AAA AGA GTG 3'        |
| G306A (R)  | 5' CAC TCT TTT TCT TTC AGC ACC GGA AAC ACC ACG 3'        |
| E307A (F)  | 5' GGT GTT TCC GGT GGT GCA AGA AAA AGA GTG TC 3'         |
| E307A (R)  | 5' GAC ACT CTT TTT CTT GCA CCA CCG GAA ACA CC 3'         |
| V303L (F)  | 5' ATT TTG TCC GTG GTC TTT CCG GTG GTG AAA G 3'          |
| V303L (R)  | 5' CTT TCA CCA CCG GAA AGA CCA CGG ACA AAA T 3'          |
| S304N (F)  | 5' GAT TTT GTC CGT GGT GTT AAC GGT GGT GAA AGA AAA AG    |
| S304N (R)  | 5' CTT TTT CTT TCA CCA CCG TTA ACA CCA CGG ACA AAA TC 3' |
| G305V (F)  | 5' CGT GGT GTT TCC GTT GGT GAA AGA AAA AG 3'             |
| G305V (R)  | 5' CTT TTT CTT TCA CCA ACG GAA ACA CCA CG 3'             |
| G306E (F)  | 5' GGT GTT TCC GGT GAA GAA AGA AAA AGA G 3'              |
| G306E (R)  | 5' CTC TTT TTC TTT CTT CAC CGG AAA CAC C 3'              |
| E307Q (F)  | 5' GTT TCC GGT GGT CAA AGA AAA AGA GTG 3'                |
| E307Q (R)  | 5' CAC TCT TTT TCT TTG ACC ACC GGA AAC 3'                |
| <b><i>NBD2 Signature region Oligonucleotides</i></b> |  |
| L1001A (F)   | 5' GCT GGT GAA GGT GCG AAT GTT GAA CAA AG 3'             |
| L1001A (R)   | 5' CTT TGT TCA ACA TTC GCA CCT TCA CCA GC 3'             |
| N1002A (F)   | 5' GCT GGT GAA GGT TTG GCT GTT GAA CAA AGA AAA AG 3'     |
| N1002A (R)   | 5' CTT TTT CTT TGT TCA ACA GCC AAA CCT TCA CCA GC 3'     |
| V1003A (F)   | 5' GGT GAA GGT TTG AAT GCT GAA CAA AGA AAA AG 3'         |
| V1003A (R)   | 5' CTT TTT CTT TGT TCA GCA TTC AAA CCT TCA CC 3'         |
| E1004A (F)   | 5' AGG TTT GAA TGT TGC ACA AAG AAA AAG ATT G 3'          |
| E1004A (R)   | 5' CAA TCT TTT TCT TTG TGC AAC ATT CAA ACC T 3'          |
| Q1005A (F)   | 5' TTG AAT GTT GAA GCA AGA AAA AGA TTG AC 3'             |
| Q1005A (R)   | 5' GTC AAT CTT TTT CTT GCT TCA ACA TTC AA 3'             |
| L1001V (F)   | 5' CTGGTGAAGGTGTGAATGTTGAACAAAG 3'                       |
| L1001V (R)   | 5' CTTTGTTC AACATT CACACCTTCACCAG 3'                     |
| N1002S (F)   | 5' GCT GGT GAA GGT TTG AGT GTT GAA CAA AGA AAA AG 3'     |
| N1002S (R)   | 5' CTT TTT CTT TGT TCA ACA CTC AAA CCT TCA CCA GC 3'     |
| V1003G (F)   | 5' GGT GAA GGT TTG AAT GGT GAA CAA AGA AAA AG 3'         |
| V1003G (R)   | 5' CTT TTT CTT TGT TCA CCA TTC AAA CCT TCA CC 3'         |
| E1004G (F)   | 5' GGT GAA GGT TTG AAT GTT GGA CAA AGA AAA AGA TTG 3     |
| E1004G (R)   | 5' CAA TCT TTT TCT TTG TCC AAC ATT CAA ACC TTC ACC 3'    |
| Q1005E (F)   | 5' GGTTTGAATGTTGAAGAAAGAAAAGATTGACC 3'                   |
| Q1005E (R)   | 5' GGTC AATCTTTTCTTTCTTCAACATTCAAACC 3'                  |

| <i>Signature Swapped oligonucleotides</i> |  |
|---|--|
| Signature 1-1 (F)                         | 5'GCT GGT GAA GGT GTG AGT GGT GGA GAA AGA AAA AGA<br>TTG3'   |
| Signature 1-1 (R)                         | 5'CAA TCT TTT TCT TTC TCC ACC ACT CAC ACC TTC ACC<br>AGC 3'  |
| Signature 2-2 (F)                         | 5' TTT GTC CGT GGT CTT AAC GTT GAG CAA AGA AAA AGA<br>GTG 3' |
| Signature 2-2 (R)                         | 5' CAC TCT TTT TCT TTG CTC AAC GTT AAG ACC ACG GAC<br>AAA 3' |

**Table 2: List of Strains used in this study**

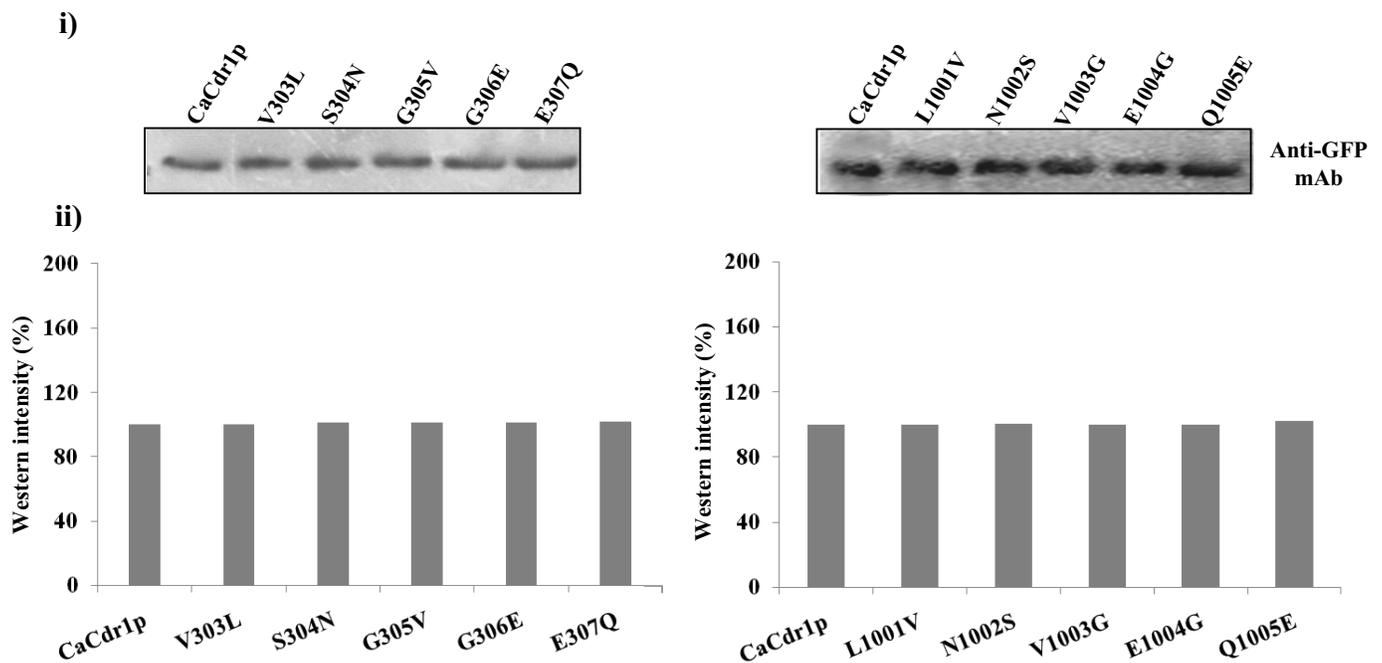
| <b>Name</b>                      | <b>Description</b>   | <b>Reference</b> |
|----------------------------------|--|------------------|
| Yeast strain AD1-8u <sup>-</sup> | MATa pdr1-3 hisG ura3 $\Delta$ yor1::hisG $\Delta$ snq2::hisG $\Delta$ pdr10::hisG $\Delta$ pdr11::hisG $\Delta$ ycf1::hisG $\Delta$ pdr15::hisG | [35]             |
| CaCdr1p                          | AD1-8u- cells harboring CDR1-GFP ORF integrated at PDR5 locus  | [34]             |
| V303A                            | CDR1-GFP cells carrying V303A mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| S304A                            | CDR1-GFP cells carrying S304A mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| G305A                            | CDR1-GFP cells carrying G305A mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| G306A                            | CDR1-GFP cells carrying G306A mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| E307A                            | CDR1-GFP cells carrying E307A mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| V303L                            | CDR1-GFP cells carrying V303L mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| S304N                            | CDR1-GFP cells carrying S304N mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| G305V                            | CDR1-GFP cells carrying G305V mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| G306E                            | CDR1-GFP cells carrying G306E mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| E307Q                            | CDR1-GFP cells carrying E307Q mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| L1001A                           | CDR1-GFP cells carrying L1001 mutation in CDR1 ORF and integrated at PDR5 locus  | This study       |
| N1002A                           | CDR1-GFP cells carrying N1002A mutation in CDR1 ORF and integrated at PDR5 locus   | This study       |
| V1003A                           | CDR1-GFP cells carrying V1003A mutation in CDR1 ORF and integrated at PDR5 locus   | This study       |
| E1004A                           | CDR1-GFP cells carrying E1004A mutation in CDR1 ORF and integrated at PDR5 locus   | This study       |
| Q1005A                           | CDR1-GFP cells carrying Q1005A mutation in CDR1 ORF and integrated at PDR5 locus   | This study       |
| L1001V                           | CDR1-GFP cells carrying L1001V mutation in CDR1 ORF and integrated at PDR5 locus   | This study       |
| N1002S                           | CDR1-GFP cells carrying N1002S mutation in CDR1 ORF and integrated at PDR5 locus   | This study       |
| V1003G                           | CDR1-GFP cells carrying V1003G mutation in CDR1 ORF and integrated at PDR5 locus   | This study       |
| E1004G                           | CDR1-GFP cells carrying E1004G mutation in CDR1 ORF and integrated at PDR5 locus   | This study       |
| Q1005E                           | CDR1-GFP cells carrying Q1005E mutation in CDR1 ORF and integrated at PDR5 locus   | This study       |
| Signature 1-1                    | CDR1-GFP cells carrying mutation having two conserved Signature motif in CDR1 ORF and integrated at PDR5 locus                                   | This study       |
| Signature 2-2                    | CDR1-GFP cells carrying mutation having two degenerated Signature motif in CDR1 ORF and integrated at PDR5 locus                                 | This study       |
| Signature 2-1                    | CDR1-GFP cells carrying mutation by swapping the position of the Signature motifs in CDR1 ORF and integrated at PDR5 locus                       | This study       |

Figure S1



(i) Expression of WT-CaCdr1p and its alanine mutant variants. PM of WT-CaCdr1p and mutants expressing cells were prepared as described earlier [34]. Immuno-detection of proteins was performed by separating the PM proteins (5  $\mu$ g) on an 8% SDS PAGE, electroblotted on nitrocellulose membrane and incubated with mouse monoclonal anti-GFP antibody (diluted 1:5000). Proteins were detected by chemiluminescence using an ECL Kit (Amersham). (ii) Normalized signal intensity of Western blot of (i).

Figure S2



(i) Expression of WT-CaCdr1p and its mutant variants. PM of WT-CaCdr1p and mutants expressing cells were prepared as described earlier [34]. Immuno-detection of proteins was performed by separating the PM proteins (5  $\mu$ g) on an 8% SDS PAGE, electroblotted on nitrocellulose membrane and incubated with mouse monoclonal anti-GFP antibody (diluted 1:5000). Proteins were detected by chemiluminescence using an ECL Kit (Amersham). (ii) Normalized signal intensity of Western blot of (i).