

## S2H S2L Μ W 3 W 3 5 Μ 1 2 5 Μ 2 4 4







## S2I M W 1 2 3 4 5 M W 1 2 3 4 5 M



**FIG. S2.** Clone check of the overexpression mutants isolated after transformation. Clones for overexpressing AO090001000224 (S2C), AO090011000448 (S2D), AO090023000205&6 (S2G), AO090026000492 (S2E), AO090012000721 (S2F), AO090102000339 (S2H), AO090011000838 (S2L), AO090005000456 (S2I), and AO090023000893 (S2J) are shown. Lane M: 1 kb DNA ladder marker [1-10 kb], lane W: Wild-type strain as a negative control. Clones that were considered to be positive homokaryons are shown in red.







**FIG. S2 (continued).** Clone check of the overexpression mutants isolated after transformation. Clones for overexpressing AO090005001021 (S2A), AO090701000644 (S2B), AO090011000863 (S2N), AO090102000393 (S2K), and AO090124000083&4 (S2M) are shown. Lane M: 1 kb DNA ladder marker [1-10 kb], lane W: Wild-type strain as a negative control. Clones that were considered to be positive homokaryons are shown in red.