## Supplementary Table - Amino acid substitution in native genome of NeoChr strains

Amino acid substitutions identified in the genome of the constructed strains as compared to most relevant parental strain.

|  |  |  |  |
| --- | --- | --- | --- |
| Systematic name | Name | Type | Amino acid change |
| **IMF27 compared to IMX589** | | | |
| YPL283W-A | - | Intron | - |
| YNL327W | *EGT2* | synonymous | Tyr-583-Tyr |
| YNL327W | *EGT2* | Non-synonymous | Thr-586-Ser |
| YNL161W | *CBK1* | Non-synonymous | Ser-711-Ala |
| **IMF29 compared to IMX589** | | | |
| YPL283W-A | - | intron | - |
| YPL283W-A | - | intron | - |
| YPL283W-A | - | intron | - |
| YPL283W-A | - | Non-synonymous | Gly-132-Ser |
| YMR160W | - | Non-synonymous | Gln-11-Arg |
| YNL327W | *EGT2* | Synonymous | Tyr-583-Tyr |
| YNL327W | *EGT2* | Non-synonymous | Thr-586-Ser |
| YNL161W | *CBK1* | Non-synonymous | Ser-711-Ala |
| **IMF41 compared to IMF29** | | | |
| YCR089W | FIG2 | Non-synonymous | Thr-1017-Arg |
| YCR089W | FIG2 | Non-synonymous | Ala-1020-Ser |
| YDR224C | HTB1 | Synonymous | Ala-121-Ala |
| YIL137C | *TMA108* | Non-synonymous | Ser-742-Leu |
| **IMF42 compared to IMF27** | | | |
| YCR089W | FIG2 | Non-synonymous | Thr-1017-Arg |
| YCR089W | FIG2 | Non-synonymous | Ala-1020-Ser |
| YBL113C | - | Non-synonymous | His-252-Asn |
| **IMF47 compared to IMF42** | | | |
| YEL075W-A | - | intron | - |
| YHR016C | *YSC84* | intron | - |
| YJR143C | *PMT4* | Non-synonymous | Met-1-Ile |