**Supplementary Table 4. The isolated dominant blast-resistance genes in rice reference genome.**

| **Locus** | **Locus name** | **Gene** | **Prediction** |
| --- | --- | --- | --- |
| Pi-a | Magnaporthe oryzae resistance-a | LOC\_Os11g11790 | No |
| Pi-b | Magnaporthe oryzae resistance-b | LOC\_Os02g57310 | No |
| Pi5/Pi3/Pi-i | Magnaporthe oryzae resistance-5 | LOC\_Os09g15840 | No |
| Pik-h/Pi-54 | Magnaporthe oryzae resistance-k | LOC\_Os11g42010 | No |
| Pi-sh | Magnaporthe oryzae resistance-sh | LOC\_Os01g57340 | No |
| Pi-t | Magnaporthe oryzae resistance-t | LOC\_Os01g05620 | No |
| Pi-ta | Magnaporthe oryzae resistance-ta | LOC\_Os12g18360 | Yes |
| Pi-9/Pi-2/Pi50 | Magnaporthe oryzae resistance-9 | LOC\_Os06g17900 | No |
| Pi-d2 | Magnaporthe oryzae resistance-d2 | LOC\_Os06g29810 | Yes |
| Pi-d3 | Magnaporthe oryzae resistance-d3 | LOC\_Os06g22460 | No |
| pi-21 | Magnaporthe oryzae resistance-21 | LOC\_Os04g32850 | No |
| Pi-56 | Magnaporthe oryzae resistance-56(t) | LOC\_Os09g16000 | No |