- **Supplementary Fig. S1.** Nucleotide sequence of *ChrSy.fgenesh.gene.28* coding region (A) and amino acid sequence of OsCpn60β3 protein (B). Predicted sequences in public annotation database are in black. Red indicates sequences identified by sequencing cDNA.
-
- **Supplementary Fig. S2.** Pair-wise identity scores among rice Cpn60 subunits, and phylogenetic tree of rice and *Arabidopsis* Cpn60 subunits. (A) Identity of amino acid sequences among rice Cpn60 subunits. Full-length amino acid sequences were aligned with each other and % identities were calculated by Blast2 tool. (B) Phylogenetic analysis. Rice and *Arabidopsis* chaperonin 60 subunits were aligned using ClustalW. Phylogenetic tree was constructed by MEGA software via neighbor-joining method.
-
- **Supplementary Fig. S3.** Expression analysis of rice plastid *Cpn60* genes, based on data from rice oligonucleotide array database (http://www.ricearray.org/). *OsCpn60β3* is absent from that database.
-
- **Supplementary Fig. S4.** Response to cold stress. Seedlings (14-d-old) first grown in soil at constant 27°C were subjected to 10°C. Third leaves were sampled after 1, 4, 8, 12, and 24 h. *UBQ5* was internal control. Error bars indicate standard deviations; n = 3.

A

ATGTCGAGGATTGCGGCGCCGCCGCCGCCGCTCTCCGGCACCGGCAAGCCGCCCACACTCCCCTTCTCCCTCAAGAAGCCGCCGC
CCATGCCGGTGTACAAGGACCTGCACTTCAACCGCGACCTCTCCGCCACCAAGAAGCTGCAGGCCGGCGTGGACCTGGTGGCACG
GCTGGTCGGGGTGACGCTGGGGCCCAAGGGGAGGAACGTGGTGCTGAGCAACAAGTACGGCCCTCCCAAGATCGTCAACGATGG
GGAGACGGTCCTCAAGGAGATTGAATTGGAGGACCCGTTGGAAAATCTTGGAGTGAAGCTGGTCAGACAGGCTGGTGCCAGGACG
AACGATGTTGCTGGTGATGGTTGTACCACTTCCATAATCCTTGCTCAAGGCCTCATCGCTGAAGGAATGAAGGTGCTTGCAGCTGGA
ATTAATCCTGTCCAGATTGCGCGGGGCATTGAGAAGACTGCTTCTGCTTTGGTGTCTGAACTCAGATTGATGTCCCGGGAGATAGAA
GACCATGAAATTGCACATGTGGCTGCAGTTAGTGCAGGAGATGATTATGCTGTTGGAAATATGATTTCTGATGCTTTTAAAAGAGTA
GGCAGGAAAGGCATGGTGAGGATTGAAAATGGAAGGGGCACGGAAAATGGTCTAGAGATTGTGGAAGGAATGCAATTTGAACGT
GGTTACCTCTCACCGTACTTTGTGACTGATTGTACAAATATGTCCGCGGAGTTTACTGACTGTAAGATATTGTTGGTTGACAAGAAAA
TTACTGATGCAAGTGAGATTATAAGGATATTGGATAGTGCTGTCAAAGAAGATTATCCATTGTTGATAGTTGCCGAGGATGTGGAAG
AAAAAGCAATGGCTGATTTGATAAAAAACAAGCTAAAAGGGACAATTAAAGTGGCTGCAATCAAGGCCCCTTCCTTTGGGGAACAA
ATGACTCAATGTTTGGATGACATTGCCATCATGACAGGAGGTACACTAGTGCGTGAAGACATGGGATATACACTAGAAAAGGCAGG
GAAAGAGGTTCTAGGTTCTGCTTCTAAGGTTGTAGTCGGGAAAGACTCAACACTAATTGTTACCGATGGAAGCACCCAACATGTGAT
CGAGAAAAGGGTTGCTCAGATAAAGGGCCAAATTGAGAACTCAAGTGAGAGGTACCAGAAGAAGATATTGGGTGAGAGAATAGC
AAGGTTATGTGGTGGAATTGCAATCATTCAGGTCGGTGCTCAAACAATCATTGAGATGAAAGACAAGAAGCTCAGAATTGAAGATG
CCCTTAATGCAACAAAGGCAGCTATTGAGGAAGGAGTTGTGATAGGTGGTGGATGTAGCCTATTAAGATTATCCATGAAGATTGAT
AGAATTAAGGAATCATTGGATAATATGGAGCAGAAGATTGGCGCTGACATCTTCAAACAGGCTTTGAGTTACCCTACTGCATTGATT
GCAAACAATGCTGGGGTGAACGGCAGCTTCGTCATAGAAAAGGTGTTATTAAATGAGGACAGTAGATATGGCTACAATGCTGCCAA
GAACCGCTATGAGGACTTAATGGCCGCTGGAATATTAGATCCATCAAAGGTTGTGAGATGTTGCATAGAACATGCTGCTGTGGTCG
CCAAGTCTTTTCTCACATCTGACGTGGTGATTGTTGAGGCGAAAGAAGGCAAACCAGTTCGCATAAGGCCCCCGATGCCTCCTAAA
AGTTTGATACCCCCAATGCCTGCTTCTGCTTCAGGAATTCGAGTG**TAG**

B

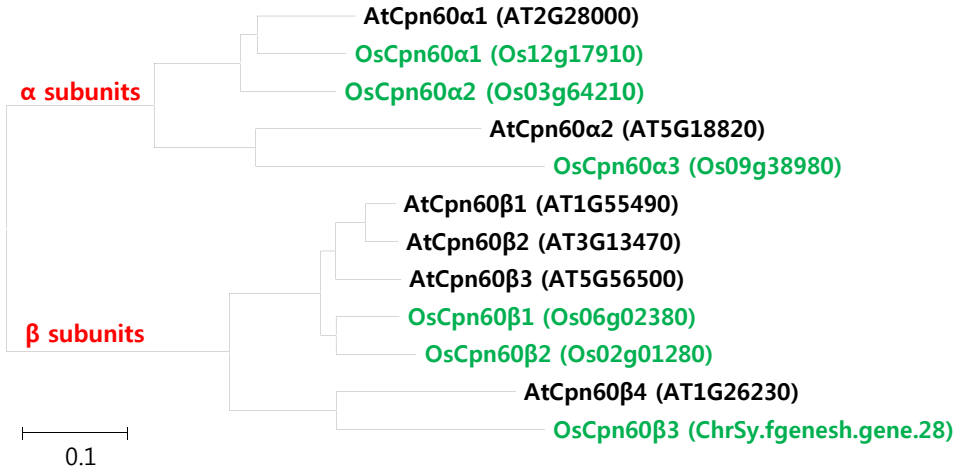
MSRIAAPPPPLSGTGKPPTLPFSLKKPPPMPVYKDLHFNRDLSATKKLQAGVDLVARLVGVTLGPKGRNVVLSNKYGPPKIVNDGETVLKEIE
LEDPLENLGVKLVRQAGARTNDVAGDGCTTSIILAQGLIAEGMKVLAAGINPVQIARGIEKTASALVSELRLMSREIEDHEIAHVAAVSAGDD
YAVGNMISDAFKRVGRKGMVRIENGRGTENGLEIVEGMQFERGYLSPYFVTDCTNMSAEFTDCKILLVDKKITDASEIIRILDSAVKEDYPLLI
VAEDVEEKAMADLIKNKLKGTIKVAAIKAPSFGEQMTQCLDDIAIMTGGTLVREDMGYTLEKAGKEVLGSASKVVVGKDSTLIVTDGSTQHV
IEKRVAQIKGQIENSSERYQKKILGERIARLCGGIAIIQVGAQTIIEMKDKKLRIEDALNATKAAIEEGVVIGGGCSLLRLSMKIDRIKESLDNMEQ
KIGADIFKQALSYPTALIANNAGVNGSFVIEKVLLNEDSRYGYNAAKNRYEDLMAAGILDPSKVVRCCIEHAAVVAKSFLTSDVVIVEAKEGK
PVRIRPPMPPKSLIPPMPASASGIRV*

Supplementary Figure S1.

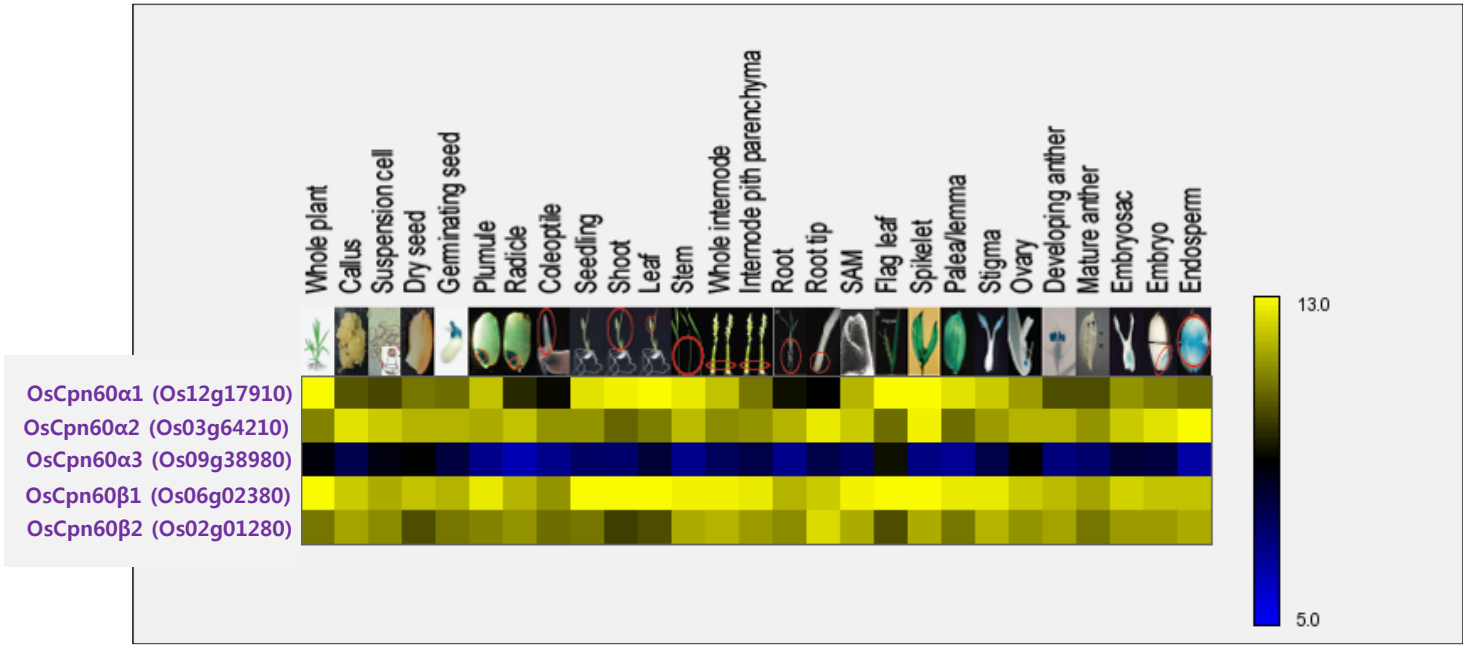
A

Subunits	α1	α2	α3	β1	β2	β3
α1	100	86	61	52	50	46
α2		100	60	52	49	47
α3			100	42	42	40
β1				100	84	66
β2					100	61
β3						100

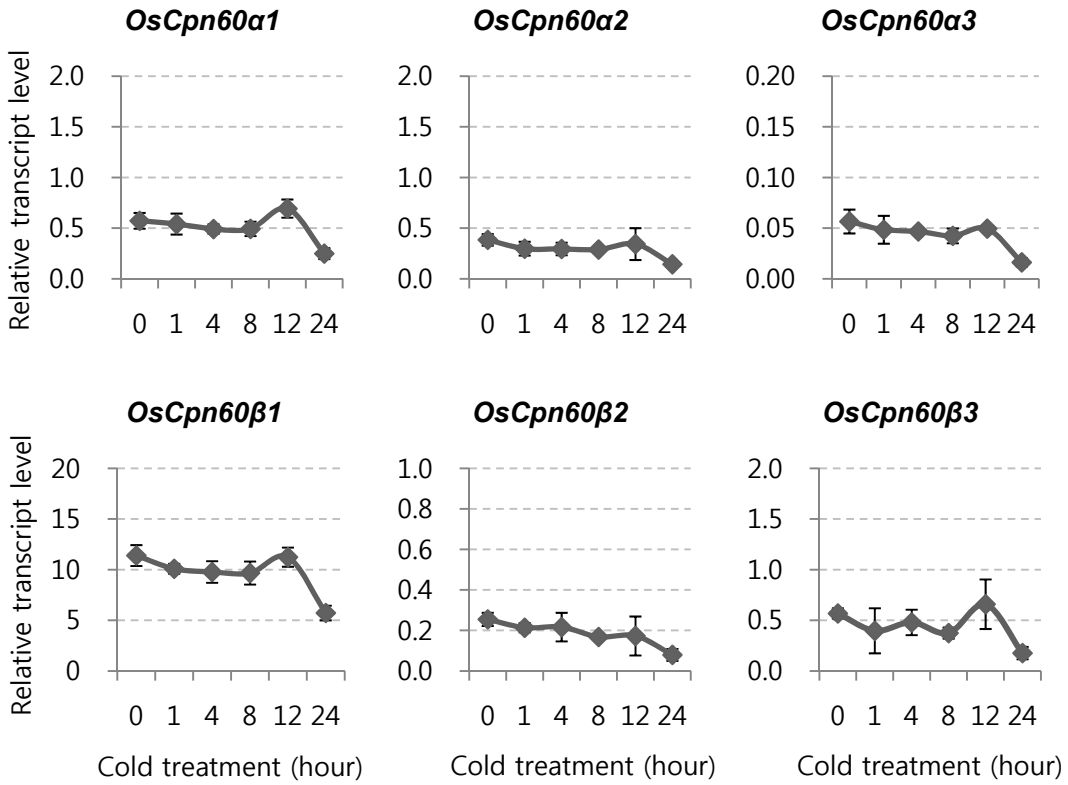
B



Supplementary Figure S2.



Supplementary Figure S3.



Supplementary Figure S4.