| **Accession numbera** | **GI numberb** | **Subunit Name/Isoformc** | **Speciesd** | **Tissuee** | **Treatmentf** | **Responseg** | **Referenceh** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Complex I** | | | | | | | |
| At5g52840 | gi|18423437| | B13 NADH dehydrogenase B13 subunit | *Pisum sativum* | Leaf | 4 °C for 36 h | No change | (Taylor et al. 2005) |
| *Ricinus communis* | gi|255545146| | B13 NADH dehydrogenase B13 subunit | *Citrus sinensis* | Fruit | Field frost | Increase | (Perotti et al. 2014) |
| At3g12260 | gi|75273261| | B14 NADH dehydrogenase B14 subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | No Change | (Tan et al. 2012) |
| Os07g0640100 | gi|115473643| | B14.5b NADH dehydrogenase B14.5b subunit | *Musa paradisiaca* | Leaf | 8 °C for 6 and 24 h | Increase | (Yang et al. 2012) |
| At4g20150 | gi|332658880| | NADH dehydrogenase plant specific subunit 9kDa | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | No Change | (Tan et al. 2012) |
| At2g27730 | gi|25091508| | B16 NADH dehydrogenase B16 subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | No Change | (Tan et al. 2012) |
| At1g04630 | gi|42561697| | B16.6-1 NADH dehydrogenase B16.6-1 subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | Increase | (Tan et al. 2012) |
| At2g33220 | gi|18403216| | B16.6-2 NADH dehydrogenase B16.6-2 subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | No Change | (Tan et al. 2012) |
| At4g16450 | gi|28416547| | NADH dehydrogenase 20.9 kDa subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | No Change | (Tan et al. 2012) |
| Os05g0509200 | gi|115464801| | NADH dehydrogenase 24 kDa subunit | *Oryza sativa* | Leaf | 14/12 °C (d/n) for 48 h | Increase | (Neilson et al. 2011) |
| At2g20360 | gi|75206396| | NADH dehydrogenase 39 kDa subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | No Change | (Tan et al. 2012) |
| Os02g0816800 | gi|115449641| | NADH dehydrogenase 39 kDa subunit | *Oryza sativa* | Leaf | 12/5 °C (d/n) for 3 days | Decrease | (Gammulla et al. 2011) |
| Os02g0816800 | gi|115449641| | NADH dehydrogenase 39 kDa subunit | *Oryza sativa* | Leaf | 20/12 °C (d/n) for 3 days | Increase | (Gammulla et al. 2011) |
| Os02g0816800 | gi|115449641| | NADH dehydrogenase 39 kDa subunit | *Musa paradisiaca* | Leaf | 8 °C for 24 h | Increase | (Yang et al. 2012) |
| Os03g50540 | gi|18071341| | NADH dehydrogenase 75 kDa subunit | Oryza sativa | Leaf | Progressive 15 °C, 10 °C and 5 °C for 24 h | Increase | (Cui et al. 2005) |
| At5g37510 | gi|222423198| | NADH dehydrogenase 75 kDa subunit | Pisum sativum | Leaf | 4 °C for 36 h | Decrease | (Taylor et al. 2005) |
| Os03g0713400 | gi|115454943| | NADH dehydrogenase 75 kDa subunit | Oryza sativa | Leaf | 12/5 °C (d/n) for 3 days | Decrease | (Gammulla et al. 2011) |
| Os03g0713400 | gi|115454943| | NADH dehydrogenase 75 kDa subunit | Oryza sativa | Leaf | 20/12 °C (d/n)t for 3 days | Decrease | (Gammulla et al. 2011) |
| Os03g0713400 | gi|115454943| | NADH dehydrogenase 75 kDa subunit | Oryza sativa | Leaf | 14/12 °C (d/n) for 48 h | Decrease | (Neilson et al. 2011) |
| Os03g50540 | gi|18071341| | NADH dehydrogenase 75 kDa subunit | Oryza sativa | Leaf | 6 °C for 6 and 24 h | Decrease | (Yan et al. 2006) |
| AtMg00516 | gi|45477072| | ND1 NADH dehydrogenase subunit 1 | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| AtMg00285 | gi|42559318| | ND2 NADH dehydrogenase subunit 2 | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | No Change | (Tan et al. 2012) |
| AtMg00070 | gi|41019517| | ND9 NADH dehydrogenase subunit 9 | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | Increase | (Tan et al. 2012) |
| OsM1g00590 | gi|60498753| | ND9 NADH dehydrogenase subunit 9 | *Triticum aestivum* | Crown | 3 °C for 3 weeks | Decrease | (Herman et al. 2006) |
| At1g79010 | gi|15219265| | TYKY-1 NADH dehydrogenase TYKY-1 subunit | *Citrus sinensis* | Fruit | Field frost | Increase | (Perotti et al. 2014) |
| Complex II | | | | | | | |
| Os07g04240 | gi|75135397| | SDH1-1 Succinate Dehydrogenase Subunit 1-1 | *Populus cathayana* | Leaf | 4 °C for 14 days | Increase | (Zhang et al. 2012) |
| At1g08480 | gi|18390902| | SDH6 Succinate Dehydrogenase Subunit 6 | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
|  |  |  |  |  |  |  |  |
| Complex III | | | | | | | |
| At3g27240 | gi|15232125| | CYC1-1 Complex III cytochrome c1 | Arabidopsis thaliana | Cell Culture (DG) | 4 °C for 48 h | Increase | (Tan et al. 2012) |
| At5g40810 | gi|75171315| | CYC1-2 Complex III cytochrome c1 | Arabidopsis thaliana | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| At4g32470 | gi|11692914| | QCR7-1 Complex III ubiquinol- cytochrome c reductase complex 14 kDa subunit | Arabidopsis thaliana | Cell Culture (DG) | 4 °C for 48 h | Increase | (Tan et al. 2012) |
| At5g25450 | gi|403399498| | QCR7-2 Complex III ubiquinol- cytochrome c reductase complex 14 kDa subunit | Arabidopsis thaliana | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| At3g52730 | gi|15231675| | QCR9 Complex III ubiquinol- cytochrome c reductase 9 kDa subunit | Arabidopsis thaliana | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| At5g13430 | gi|18417067| | UCR1 Complex III ubiquinol- cytochrome c reductase iron-sulfur subunit | Arabidopsis thaliana | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| Os02g0520800 | gi|115446391| | UCR1 Complex III ubiquinol- cytochrome c reductase iron-sulfur subunit | Oryza sativa | Leaf | 20/12 °C (d/n) for 3 days | Increase | (Gammulla et al. 2011) |
| Os02g0520800 | gi|115446391| | UCR1 Complex III ubiquinol- cytochrome c reductase iron-sulfur subunit | Oryza sativa | Leaf | 12/5 °C (d/n) for 3 days | Decrease | (Gammulla et al. 2011) |
|  |  |  |  |  |  |  |  |
| Complex IV | | | | | | | |
| At4g21105 | gi|145333558| | COX X4 Cytochrome c oxidase X4 subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | No Change | (Tan et al. 2012) |
| At2g16460 | gi|330251406| | COX X6 Cytochrome c oxidase X6 subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | No Change | (Tan et al. 2012) |
| Os01g0612200 | gi|75100994| | COX 5b Cytochrome c oxidase subunit 5b | *Oryza sativa* | Microspore | 12 °C for 4 days | Increase | (Imin et al. 2006) |
| At5g61310 | gi|88010838| | COX 5c Cytochrome c oxidase subunit 5c | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| At4g37830 | gi|75213718| | COX 6a Cytochrome c oxidase | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| Os07g42910 | gi|22296419| | COX 6b Cytochrome c oxidase | *Cicer arietinum L.* | Leaf | 4 °C for 8 h | Increase | (Heidarvand and Maali-Amiri 2013) |
| Antibody |  | COX2 Cytochrome c oxidase subunit 2 | Triticum aestivum | Root | Grown at 15 °C | Increase | (Kurimoto et al. 2004) |
| Antibody |  | COX2 Cytochrome c oxidase subunit 2 | Solanum lycopersicum | Fruit | 4 °C for 7 days | Increase | (Holtzapffel et al. 2002) |
| Pinus sylvestris | gi|125327786| | COX2 Cytochrome c oxidase subunit 2 | Lolium perenne (frost sensitive) | Leaf | 4/2 °C (d/n) for 7 days | Decrease | (Bocian et al. 2011) |
| Pinus sylvestris | gi|125327786| | COX2 Cytochrome c oxidase subunit 2 | Lolium perenne (frost tolerant) | Leaf | 4/2 °C (d/n) for 26 h | Increase | (Bocian et al. 2011) |
| Pinus sylvestris | gi|125327786| | COX2 Cytochrome c oxidase subunit 2 | Lolium perenne (frost tolerant) | Leaf | 4/2 °C (d/n) for 7 days | Increase | (Bocian et al. 2011) |
| OsM1g00330.1 | gi|194033234| | COX2 Cytochrome c oxidase subunit 2 | Musa paradisiaca | Leaf | 8 °C for 6 and 24 h | Increase | (Yang et al. 2012) |
|  |  |  |  |  |  |  |  |
| Complex V | | | | | | | |
| *Pisum sativum* | gi|543866| | ATP 1 ATP synthase 1 (α) subunit | *Pisum sativum* | Leaf | 4 °C for 36 h | Increase | (Taylor et al. 2005) |
| AtMg01190 | gi|14916970| | ATP 1 ATP synthase 1 (α) subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| *Glycine max* | gi|231585| | ATP 1 ATP synthase 1 (α) subunit | *Glycine max* | Seed | Imbided 4 °C for 24 h | Increase | (Cheng et al. 2010) |
| *Stauntonia hexaphylla* | gi|34539443| | ATP 1 ATP synthase 1 (α) subunit | *Vigna radiata* | Epicotyl | 10 °C for 3 days | Decrease | (Huang et al. 2006) |
| *Beta vulgaris* | gi|396760| | ATP 1 ATP synthase 1 (α) subunit | *Prunus persica* | Mesocarp | 4 °C for 3 weeks | No change | (Nilo et al. 2010) |
| *Maesa tenera* | gi|20146590| | ATP 1 ATP synthase 1 (α) subunit | *Zoysia japonica* | Stolon | 8/2 °C (d/n) for 28 days | Increase | (Xuan et al. 2013) |
| *Maesa tenera* | gi|20146590| | ATP 1 ATP synthase 1 (α) subunit | *Zoysia metrella* | Stolon | 8/2 °C (d/n) for 28 days | Increase | (Xuan et al. 2013) |
| *Triticum aestivum* | gi|13725| | ATP 1 ATP synthase 1 (α) subunit | *Oryza sativa* | Leaf | Progressive 15 °C, 10 °C and 5 °C for 24 h | Increase | (Cui et al. 2005) |
| OsM1g00580 | gi|89280711| | ATP 1 ATP synthase 1 (α) subunit | *Oryza sativa* | Leaf | 14/12 °C (d/n) for 72 h | Decrease | (Neilson et al. 2011) |
| *Secale cereale* | gi|1430900| | ATP 1 ATP synthase 1 (α) subunit | *Triticum aestivum* | Crown | 3 °C for 21 days | Decrease | (Herman et al. 2006) |
| *Triticum aestivum* | gi|114419| | ATP 1 ATP synthase 1 (α) subunit | *Triticum aestivum* | Crown | 3 °C for 21 days | Decrease | (Herman et al. 2006) |
| *Pisum sativum* | gi|75317803| | ATP 2 ATP synthase 2 (β) subunit | *Pisum sativum* | Leaf | 4 °C for 36 h | Increase | (Taylor et al. 2005) |
| *Brachypodium distachyon* | gi|357135971| | ATP 2 ATP synthase 2 (β) subunit | *Triticum aestivum* | Crown | 4 °C for 21 days | Increase | (Kosová et al. 2013) |
| Os05g47980 | gi|218146| | ATP 2 ATP synthase 2 (β) subunit | *Oryza sativa* | Leaf | 5 °C for 48 h | Decrease | (Komatsu et al. 2009) |
| *Hevea brasiliensis* | gi|231586| | ATP 2 ATP synthase 2 (β) subunit | *Prunus persica* | Bark | 5 °C for 3 and 5 weeks | Increase | (Renaut et al. 2008) |
| *Nicotiana plumbaginifolia* | gi|114421| | ATP 2 ATP synthase 2 (β) subunit | *Prunus persica* | Bark | 5 °C for 3 and 5 weeks | Increase | (Renaut et al. 2008) |
| At5g08670/At5g08680/At5g08690 | gi|15809909| | ATP 2 ATP synthase 2 (β) subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| At5g08670/At5g08680/At5g08690 | gi|15809909| | ATP 2 ATP synthase 2 (β) subunit | *Arabidopsis thaliana* | Leaf | 5 °C for 15 min | Decrease | (Cerny et al. 2014) |
| *Triticum aestivum* | gi|525291| | ATP 2 ATP synthase 2 (β) subunit | *Triticum aestivum* | Crown | 6 °C for 3days 12 weeks | Increase | (Vitamvas et al. 2012) |
| Os01g0685800 | gi|115439241| | ATP 2 ATP synthase 2 (β) subunit | *Oryza sativa* | Leaf | 12/5 °C (d/n) for 3 days | Increase | (Gammulla et al. 2011) |
| Os01g0685800 | gi|115439241| | ATP 2 ATP synthase 2 (β) subunit | *Oryza sativa* | Leaf | 20/12 °C (d/n) for 3 days | Decrease | (Gammulla et al. 2011) |
| Os05g0553000 | gi|115465323| | ATP 2 ATP synthase 2 (β) subunit | *Oryza sativa* | Leaf | 14/12 °C (d/n) for 72 h | Decrease | (Neilson et al. 2011) |
| *Ipomoea batatas* | gi|303626| | ATP 3 ATP synthase 3 (γ) subunit | *Pisum sativum* | Leaf | 4 °C for 36 h | Increase | (Taylor et al. 2005) |
| At2g33040 | gi|15227257| | ATP 3 ATP synthase 3 (γ) subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | No Change | (Tan et al. 2012) |
| Os01g0600000 | gi|115438228| | ATP 3 ATP synthase 3 (γ) subunit | *Musa paradisiaca* | Leaf | 8 °C for 6 and 24 h | Increase | (Yang et al. 2012) |
| Os10g0320400 | gi|115481492| | ATP 3 ATP synthase 3 (γ) subunit | *Musa paradisiaca* | Leaf | 8 °C for 6 and 24 h | Increase | (Yang et al. 2012) |
| *Helianthus annuus* | TA10071\_4232 | ATP 3 ATP synthase 3 (γ) subunit | *Helianthus annuus (cold sensitive)* | Leaf | 15/5 °C (d/n) for 7 days | Increase | (Balbuena et al. 2011) |
| *Pisum sativum* | TA8602\_4232 | ATP 3 ATP synthase 3 (γ) subunit | *Helianthus annuus (cold tolerant)* | Leaf | 15/5 °C (d/n) for 7 days | Decrease | (Balbuena et al. 2011) |
| Os10g0320400 | gi|115481492| | ATP 3 ATP synthase 3 (γ) subunit | *Oryza sativa* | Leaf | 20/12 °C (d/n) for 3 days | Decrease | (Gammulla et al. 2011) |
| At5G13450 | gi|79327782| | ATP 5 ATP synthase 5 (δ) subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| Os08g0478200 | gi|115476908| | ATP 5 ATP synthase 5 (δ) subunit | *Triticum aestivum* | Leaf | 4 °C for 63 days | Decrease | (Rinalducci et al. 2011b) |
| *Pisum sativum* | gi|2493047| | ATP 5 ATP synthase 5 (δ) subunit | *Pisum sativum* | Root | 19/12 °C (d/n) for 11 days | Increase | (Dumont et al. 2011) |
| *Solanum demissum* | gi|48209968| | ATP 5 ATP synthase 5 (δ) subunit | *Triticum aestivum* | Crown | 6 °C for 12 weeks | Increase | (Vitamvas et al. 2012) |
| Os06g0646500 | gi|297606267| | ATP 5 ATP synthase 5 (δ) subunit | *Musa paradisiaca* | Leaf | 8 °C for 6 and 24 h | Increase | (Yang et al. 2012) |
| Os02g0750100 | gi|115448701| | ATP 5 ATP synthase 5 (δ) subunit | *Oryza sativa* | Leaf | 14/12 °C (d/n) for 48 h | Decrease | (Neilson et al. 2011) |
| Os08g37320 | gi|50946874| | ATP 5 ATP synthase 5 (δ) subunit | *Triticum aestivum* | Crown | 3 °C for 21 days | Decrease | (Herman et al. 2006) |
| Os02g0750100 | gi|115448701| | ATP 5 ATP synthase 5 (δ) subunit | *Oryza sativa* | Leaf | 20/12 °C (d/n) for 3 days | Decrease | (Gammulla et al. 2011) |
| At3g52300 | gi|15227257| | ATP 7 ATP synthase 7 (δ) subunit | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48 h | Decrease | (Tan et al. 2012) |
| At5G47030 | gi|15237998| | ATP 16 ATP synthase 5 (δ) subunit | *Triticum aestivum* | Crown | 6 °C for 3 days and 12 weeks | Increase | (Vitamvas et al. 2012) |
| Glycine max | gi|396230| | ATP-F(A)d ATP synthase F(A)d subunit | *Glycine max* | Seed | Imbided 4 °C for 24 h | Decrease | (Yin et al. 2009) |
| *Triticum aestivum* | gi|47607439| | ATP-F(A)d ATP synthase F(A)d subunit | *Triticum aestivum* | Leaf | 4 °C for 63 days | Decrease | (Rinalducci et al. 2011b) |
| Os02g0131300 | gi|115444021| | ATP-F(A)d ATP synthase F(A)d subunit | *Oryza sativa* | Leaf | 20/12 °C (d/n) for 3 days | Decrease | (Gammulla et al. 2011) |
|  |  |  |  |  |  |  |  |
| Alternative Respiratory Enzymes | | | | | | | |
| Antibody |  | AOX Alternative oxidase | *Malus domestica* | Fruit | 4 °C for 4 and 77 days | Increase | (Duque and Arrabaca 1999) |
| Os04g0600200 | gi|115460316| | AOX 1A Alternative oxidase 1A | *Musa paradisiaca* | Leaf | 8 °C for 6 and 24 h | Increase | (Yang et al. 2012) |
| Antibody |  | AOX Alternative oxidase | *Cucumis sativus* | Leaf | 10 °C for 2, 4 and 6 days | Increase | (Lei et al. 2010) |
| Antibody |  | AOX Alternative oxidase | *Solanum lycopersicum* | Fruit | 4 °C for 7 days | Increase | (Holtzapffel et al. 2002) |
| Os01g0830100 | gi|115440829| | NDA1 Alternative NAD(P)H dehydrogenase | *Musa paradisiaca* | Leaf | 8 °C for 6 and 24 h | Increase | (Yang et al. 2012) |
| At4g21490 | gi|240256027| | NDA2 Alternative NAD(P)H dehydrogenase | *Arabidopsis thaliana* | Cell Culture (DG) | 4 °C for 48h | Decrease | (Tan et al. 2012) |
| Antibody |  | UCP Uncoupling Protein | *Solanum lycopersicum* | Fruit | 4 °C for 7 days | Increase | (Holtzapffel et al. 2002) |
|  |  |  | OtherProteins |  |  |  |  |
| sp|P49364|GCST | gi|1346123| | Glycine Decarboxylase T subunit | *Pisum sativum* | Leaf | 19/12 °C (d/n) for 11 days | Decrease | (Dumont et al. 2011) |
| sp|P16048|GCSH | gi|1070638| | Glycine Decarboxylase H subunit | *Pisum sativum* | Leaf | 3 days of frost | Increase | (Dumont et al. 2011) |
| 1DXM\_B | gi|9955326| | Glycine Decarboxylase H subunit | *Pisum sativum* | Leaf | 4 °C for 36 h | Decrease | (Taylor et al. 2005) |
| AAA33687.1 | gi|169158| | Serine hydroxymethyltransferase | *Pisum sativum* | Leaf | 4 °C for 36 h | Decrease | (Taylor et al. 2005) |
| O80433 | gi|972776565| | Citrate Synthase | *Capsicum annuum* | Fruit | 10 oC for 21 days | Increase | (Sánchez-Bel et al. 2012) |
| O80433 | gi|972776565| | Citrate Synthase | *Capsicum annuum* | Fruit | 1 oC for 21 days | Decrease | (Sánchez-Bel et al. 2012) |
| At2g44350 | gi|41019483| | Citrate Synthase | *Arabidopsis thaliana* | Leaf | 2 oC for 2 h | Decrease | (Li et al. 2011) |
| P83372 | gi|24636275| | Citrate Synthase | *Fragaria ananassa LT-sensetive* | Crown | 2 oC for 42 days | Increase | (Koehler et al. 2012) |
| CAD24782.1 | gi|19171469| | Isocitrate Dehydrogenase | *Physcomitrella patens* | Leafy Gametophore | 0 oC for 3 days | Increase | (Wang et al. 2009) |
| P50218 | gi|2129951| | Isocitrate Dehydrogenase | *Capsicum annuum* | Fruit | 10 oC and 1 oC for up to 21 days | Increase | (Sánchez-Bel et al. 2012) |
| BAE48300 | gi|2129951| | Isocitrate Dehydrogenase | *Festuca pratensis* | Leaf | 4/2 oC for 21 d | Increase | (Kosmala et al. 2009) |
| NP\_917313 | gi|2129951| | Isocitrate Dehydrogenase | *Oryza sativa* | Root | 10 oC for 24 and 72 h | Increase | (Lee et al. 2009) |
| BAE48300 | gi|115438939| | Isocitrate Dehydrogenase | *Triticum aestivum* | Leaf | 4 oC for 42 days | Increase | (Rinalducci et al. 2011a) |
| P83373 | gi|937575958| | Malate Dehydrogenase | *Fragaria ananassa LT-sensetive* | Crown | 2 oC for 42 days | Increase | (Koehler et al. 2012) |
| AAB08874 | gi|1561774| | Malate Dehydrogenase | *Triticum aestivum* | Crown | 6 oC for 0, 3, 21 and 82 days | Increase | (Vítámvás et al. 2012) |
| Antibody |  | Oxoglutarate Dehydrogenases | Solanum lycopersicum | Fruit | 4 °C for 7 days | Decrease | (Holtzapffel et al. 2002) |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **Key** |  |  |  |  |  |  |  |
| aAccession Number | Gene Index Number of matched sequence | |  |  |  |  |  |
| bGI Number | Genbank Number of matched sequence | |  |  |  |  |  |
| cSubunit Name/Isoform | OXPHOS Component | |  |  |  |  |  |
| dSpecies | Species of protein sample | |  |  |  |  |  |
| eTissue | Tissue source of extracted protein | |  |  |  |  |  |
| fTreatment | Treatment temperature and timing | |  |  |  |  |  |
| gResponse | Change in protein abundance | |  |  |  |  |  |
| hReference | Literature reference | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **Abbreviations** |  |  |  |  |  |  |  |
| DG, Dark Grown  (d/n), (day/night) |  |  |  |  |  |  |  |

**References**

Balbuena TS, Salas JJ, Martinez-Force E, Garces R, Thelen JJ (2011) Proteome Analysis of Cold Acclimation in Sunflower. J Proteome Res 10: 2330-2346

Bocian A, Kosmala A, Rapacz M, Jurczyk B, Marczak L, Zwierzykowski Z (2011) Differences in leaf proteome response to cold acclimation between Lolium perenne plants with distinct levels of frost tolerance. J. Plant Physiol. 168: 1271-1279

Cerny M, Jedelsky PL, Novak J, Schlosser A, Brzobohaty B (2014) Cytokinin modulates proteomic, transcriptomic and growth responses to temperature shocks in Arabidopsis. Plant Cell Environ 37: 1641-1655

Cheng L, Gao X, Li S, Shi M, Javeed H, Jing X, Yang G, He G (2010) Proteomic analysis of soybean [Glycine max (L.) Meer.] seeds during imbibition at chilling temperature. Mol Breeding 26: 1-17

Cui S, Huang F, Wang J, Ma X, Cheng Y, Liu J (2005) A proteomic analysis of cold stress responses in rice seedlings. Proteomics 5: 3162-3172

Dumont E, Bahrman N, Goulas E, Valot B, Sellier H, Hilbert JL, Vuylsteker C, Lejeune-Henaut I, Delbreil B (2011) A proteomic approach to decipher chilling response from cold acclimation in pea (Pisum sativum L.). Plant Sci. 180: 86-98

Duque P, Arrabaca JD (1999) Respiratory metabolism during cold storage of apple fruit. II. Alternative oxidase is induced at the climacteric. Physiol. Plant. 107: 24-31

Gammulla CG, Pascovici D, Atwell BJ, Haynes PA (2011) Differential proteomic response of rice (Oryza sativa) leaves exposed to high- and low-temperature stress. Proteomics 11: 2839-2850

Heidarvand L, Maali-Amiri R (2013) Physio-biochemical and proteome analysis of chickpea in early phases of cold stress. J. Plant Physiol. 170: 459-469

Herman EM, Rotter K, Premakumar R, Elwinger G, Bae R, Ehler-King L, Chen SX, Livingston DP (2006) Additional freeze hardiness in wheat acquired by exposure to-3 degrees C is associated with extensive physiological, morphological, and molecular changes. J Exp Bot 57: 3601-3618

Holtzapffel RC, Finnegan PM, Millar AH, Badger MR, Day DA (2002) Mitochondrial protein expression in tomato fruit during on-vine ripening and cold storage. Functional Plant Biology 29: 827-834

Huang B, Chu CH, Chen SL, Juan HF, Chen YM (2006) A proteomics study of the mung bean epicotyl regulated by brassinosteroids under conditions of chilling stress. Cell Mol Biol Lett 11: 264-278

Imin N, Kerim T, Weinman JJ, Rolfe BG (2006) Low temperature treatment at the young microspore stage induces protein changes in rice anthers. Mol. Cell. Proteomics 5: 274-292

Koehler G, Wilson RC, Goodpaster JV, Sønsteby A, Lai X, Witzmann FA, You J-S, Rohloff J, Randall SK, Alsheikh M (2012) Proteomic study of low-temperature responses in strawberry cultivars (Fragaria× ananassa) that differ in cold tolerance. Plant Physiology 159: 1787-1805

Komatsu S, Yamada E, Furukawa K (2009) Cold stress changes the concanavalin A-positive glycosylation pattern of proteins expressed in the basal parts of rice leaf sheaths. Amino Acids 36: 115-123

Kosmala A, Bocian A, Rapacz M, Jurczyk B, Zwierzykowski Z (2009) Identification of leaf proteins differentially accumulated during cold acclimation between Festuca pratensis plants with distinct levels of frost tolerance. Journal of Experimental Botany 60: 3595-3609

Kosová K, Vítámvás P, Planchon S, Renaut J, Vanková R, Prášil IT (2013) Proteome analysis of cold response in spring and winter wheat (Triticum aestivum) crowns reveals similarities in stress adaptation and differences in regulatory processes between the growth habits. Journal of Proteome Research 12: 4830-4845

Kurimoto K, Millar AH, Lambers H, Day DA, Noguchi K (2004) Maintenance of growth rate at low temperature in rice and wheat cultivars with a high degree of respiratory homeostasis is associated with a high efficiency of respiratory ATP production. Plant and Cell Physiology 45: 1015-1022

Lee D-G, Ahsan N, Lee S-H, Lee JJ, Bahk JD, Kang KY, Lee B-H (2009) Chilling stress-induced proteomic changes in rice roots. Journal of Plant Physiology 166: 1-11

Lei T, Feng H, Sun X, Dai QL, Zhang F, Liang HG, Lin HH (2010) The alternative pathway in cucumber seedlings under low temperature stress was enhanced by salicylic acid. Plant Growth Regul 60: 35-42

Li T, Xu S-L, Oses-Prieto JA, Putil S, Xu P, Wang R-J, Li KH, Maltby DA, An L-H, Burlingame AL (2011) Proteomics analysis reveals post-translational mechanisms for cold-induced metabolic changes in Arabidopsis. Molecular Plant: ssq078

Neilson KA, Mariani M, Haynes PA (2011) Quantitative proteomic analysis of cold-responsive proteins in rice. Proteomics 11: 1696-1706

Nilo R, Saffie C, Lilley K, Baeza-Yates R, Cambiazo V, Campos-Vargas R, Gonzalez M, Meisel LA, Retamales J, Silva H, Orellana A (2010) Proteomic analysis of peach fruit mesocarp softening and chilling injury using difference gel electrophoresis (DIGE). BMC Genomics 11

Perotti VE, Moreno AS, Tripodi KE, Meier G, Bello F, Cocco M, Vazquez D, Anderson C, Podesta FE (2014) Proteomic and metabolomic profiling of Valencia orange fruit after natural frost exposure. Physiol Plant

Renaut J, Hausman JF, Bassett C, Artlip T, Cauchie HM, Witters E, Wisniewski M (2008) Quantitative proteomic analysis of short photoperiod and low-temperature responses in bark tissues of peach (Prunus persica L. Batsch). Tree Genet Genomes 4: 589-600

Rinalducci S, Egidi MG, Karimzadeh G, Jazii FR, Zolla L (2011a) Proteomic analysis of a spring wheat cultivar in response to prolonged cold stress. Electrophoresis 32: 1807-1818

Rinalducci S, Egidi MG, Mahfoozi S, Godehkahriz SJ, Zolla L (2011b) The influence of temperature on plant development in a vernalization-requiring winter wheat: A 2-DE based proteomic investigation. J Proteomics 74: 643-659

Sánchez-Bel P, Egea I, Sánchez-Ballesta MT, Martinez-Madrid C, Fernandez-Garcia N, Romojaro F, Olmos E, Estrella E, Bolarín MC, Flores FB (2012) Understanding the mechanisms of chilling injury in bell pepper fruits using the proteomic approach. Journal of Proteomics 75: 5463-5478

Tan YF, Millar AH, Taylor NL (2012) Components of mitochondrial oxidative phosphorylation vary in abundance following exposure to cold and chemical stresses. J Proteome Res 11: 3860-3879

Taylor NL, Heazlewood JL, Day DA, Millar AH (2005) Differential impact of environmental stresses on the pea mitochondrial proteome. Mol Cell Proteomics 4: 1122-1133

Vitamvas P, Prasil IT, Kosova K, Planchon S, Renaut J (2012) Analysis of proteome and frost tolerance in chromosome 5A and 5B reciprocal substitution lines between two winter wheats during long-term cold acclimation. Proteomics 12: 68-85

Vítámvás P, Prášil IT, Kosova K, Planchon S, Renaut J (2012) Analysis of proteome and frost tolerance in chromosome 5A and 5B reciprocal substitution lines between two winter wheats during long‐term cold acclimation. Proteomics 12: 68-85

Wang X, Yang P, Zhang X, Xu Y, Kuang T, Shen S, He Y (2009) Proteomic analysis of the cold stress response in the moss,Physcomitrella patens. Proteomics 9: 4529-4538

Xuan JP, Song YF, Zhang HX, Liu JX, Guo ZR, Hua YL (2013) Comparative Proteomic Analysis of the Stolon Cold Stress Response between the C-4 Perennial Grass Species Zoysia japonica and Zoysia metrella. PLoS One 8

Yan SP, Zhang QY, Tang ZC, Su WA, Sun WN (2006) Comparative proteomic analysis provides new insights into chilling stress responses in rice. Mol Cell Proteomics 5: 484-496

Yang QS, Wu JH, Li CY, Wei YR, Sheng O, Hu CH, Kuang RB, Huang YH, Peng XX, McCardle JA, Chen W, Yang Y, Rose JKC, Zhang S, Yi GJ (2012) Quantitative Proteomic Analysis Reveals that Antioxidation Mechanisms Contribute to Cold Tolerance in Plantain (Musa paradisiaca L.; ABB Group) Seedlings. Mol. Cell. Proteomics 11: 1853-1869

Yin G, Sun H, Xin X, Qin G, Liang Z, Jing X (2009) Mitochondrial damage in the soybean seed axis during imbibition at chilling temperatures. Plant Cell Physiol 50: 1305-1318

Zhang S, Feng LH, Jiang H, Ma WJ, Korpelainen H, Li CY (2012) Biochemical and Proteomic Analyses Reveal that Populus cathayana Males and Females Have Different Metabolic Activities under Chilling Stress. J Proteome Res 11: 5815-5826