| | ADK activity | | | | SnRK1 | t test values | t test values | |
|--------|--------------|---------|---------------------------|-------|-------|---------------------------|------------------|-------------------|
| | | | Fold change (Dex/Mock) | | | Fold change (Dex/Mock) | ADK activity | SnRK1 activity |
| | Mock | Dex | Mean±SE | Mock | Dex | Mean±SE | 5 | 5 |
| ADK-L5 | 294730 | 690202 | 2.363±0.083 | 32974 | 58334 | 1.765±0.039 | 3.10E-09 | 4.90E-05 |
| ADK-L6 | 438596 | 1069406 | 2.397±0.156 | 45305 | 83349 | 1.865±0.091 | 6.10E-04 | 7.05E-08 |

Table S6A. ADK and SnRK1 activities in ADK over-expression lines

Activities of ADK and SnRK1 in crude extracts from transgenic Arabidopsis lines ADK-L5 and ADK-L6 expressing ADK from a dexamethasone (dex) inducible promoter are shown. Data were obtained from three independent experiments using pooled tissue from three plants, with two replicates each. Activity values (arbitrary units) were obtained by measuring signal intensity of ³²P labeled GST-SAMS (SnRK1 substrate) or 5'AMP (ADK product) by exposing PAGE gels or TLC plates, respectively, to a phosphorimager. Data are shown graphically in Figure 7A.

| Table S6B. ADK and SnRK1 | activities in ADK RNAi lines |
|--------------------------|------------------------------|
|--------------------------|------------------------------|

| | ADK a | ctivity | SnRK1 | activity | t-test values | t-test values |
|----------|--------------|-------------------|-------------|-------------|------------------|------------------|
| | | Fold change | ; | Fold change | ADK | SnRK1 |
| | | (Dex/Mock) | | (Dex/Mock) | activity | activity |
| | Mock Dex | Mean±SE | Mock Dex | Mean±SE | | |
| dsADK-L4 | 469803188962 | 0.400 ± 0.009 | 52124 55138 | 1.045±0.056 | 4.19E-06 | 4.12E-01 |
| dsADK-L6 | 732998363729 | 0.496±0.006 | 70707 73624 | 1.034±0.042 | 2.29E-08 | 3.32E-01 |

Activities of ADK and SnRK1 in crude extracts from transgenic Arabidopsis lines dsADK-L4 and dsADK-L6 expressing ADK dsRNA from a dexamethasone (dex) inducible promoter are shown. Data were obtained from three independent experiments using pooled tissue from three plants, with two replicates each. Activity values (arbitrary units) were obtained by measuring signal intensity of ³²P labeled GST-SAMS (SnRK1 substrate) or 5'AMP (ADK product) by exposing PAGE gels or TLC plates, respectively, to a phosphorimager. Data are shown graphically in Figure 7B.

| | | Fold | change | | Fold | change | t test values | t-test values |
|----|----------|----------|--------|----------|--------|--------|---------------|---------------|
| | SnRK1 | over | WT | ADK | over | WT | SnRK1 | ADK |
| | activity | (Mean±S | SE) | activity | (Mean | ±SE) | activity | activity |
| WT | 11866 | 1±0.196 | | 293369 | 1±0.08 | 33 | - | - |
| S3 | 21560 | 1.817±0. | .233 | 349548 | 1.191± | ⊧0.295 | 0.0301 | 0.3366 |
| S5 | 31584 | 2.662±0. | .156 | 224633 | 0.766± | ±0.107 | 0.0001 | 0.1009 |

Table S6C. SnRK1 and ADK activities in SnRK1 over-expression lines

SnRK1 and ADK activities in crude extracts from transgenic *N. benthamiana* lines S3 and S5 expressing SnRK1 from the constitutive 35S promoter are shown. Data were obtained from two independent experiments using two individual plants from each line and two replicate samples. Activity values (arbitrary units) were obtained by measuring signal intensity of ³²P labeled GST-SAMS (SnRK1 substrate) or 5'AMP (ADK product) by exposing PAGE gels or TLC plates, respectively, to a phosphorimager. Data are shown graphically in Figure 7C.

| Table S6D. | SnRK1 a | and ADK | activities in | SnRK1 | antisense lines |
|------------|---------|---------|---------------|-------|-----------------|
|------------|---------|---------|---------------|-------|-----------------|

| | | Fold change | e | Fold | change | t test values | t test values |
|-------|----------|-------------------|----------|--------|--------|---------------|---------------|
| | SnRK1 | over W1 | ADK | over | ŴT | SnRK1 | ADK |
| | activity | (Mean±SE) | activity | (Mean | ±SE) | activity | activity |
| WT | 36719 | 1±0.047 | 142632 | 1±0.06 | 50 | - | - |
| AS-4 | 14784 | 0.402 ± 0.090 | 1471023 | 9.417± | =2.052 | 0.0017 | 0.0119 |
| AS-12 | 13056 | 0.355±0.067 | 1143831 | 7.441± | =0.409 | 0.0004 | 0.0002 |

SnRK1 and ADK activities in crude extracts from transgenic *N. benthamiana* lines AS-4 and AS-12 expressing antisense SnRK1 RNA from the constitutive 35S promoter are shown. Data were obtained from two independent experiments using two individual plants from each line and two replicate samples. Activity values (arbitrary units) were obtained by measuring signal intensity of ³²P labeled GST-SAMS (SnRK1 substrate) or 5'AMP (ADK product) by exposing PAGE gels or TLC plates, respectively, to a phosphorimager. Data are shown graphically in Figure 7D.