

**Table S3. List of auxin related genes that are up-regulated in *TAPG4::antisense KD1* plants**

<b>Accession</b>	<b>Description</b>	<b>Ratio (<i>TAPG4::antisense KD1</i>/WT)</b>
SL_NP000208	Aux/IAA2	4.4
SL_TC201517	Auxin-induced protein PCNT115	4.1
SL_TC194455	Auxin-induced protein PGNT1/PCNT110	3.0
SL_TC208817	Auxin-induced protein PGNT1/PCNT110	2.7
SL_TC202903	SAUR family protein	2.7
SL_BI922613	Auxin-induced protein PGNT1/PCNT110	2.6
SL_TC192282	GH3.3	2.6
SL_TC206415	SAUR family protein	2.5
SL_TC206830	Auxin-induced protein PCNT103	2.4
SL_TC194204	2,4-D inducible glutathione S-transferase	2.3
SL_TC204329	2,4-D inducible glutathione S-transferase	2.3
PH_TC2384	Auxin-induced protein 22E	2.2
SL_TC202749	Auxin and ethylene responsive GH3-like protein	2.1
SL_TC193041	Auxin-regulated dual specificity cytosolic kinase	2.0
SL_ES895408	Auxin-induced protein PCNT103	2.0

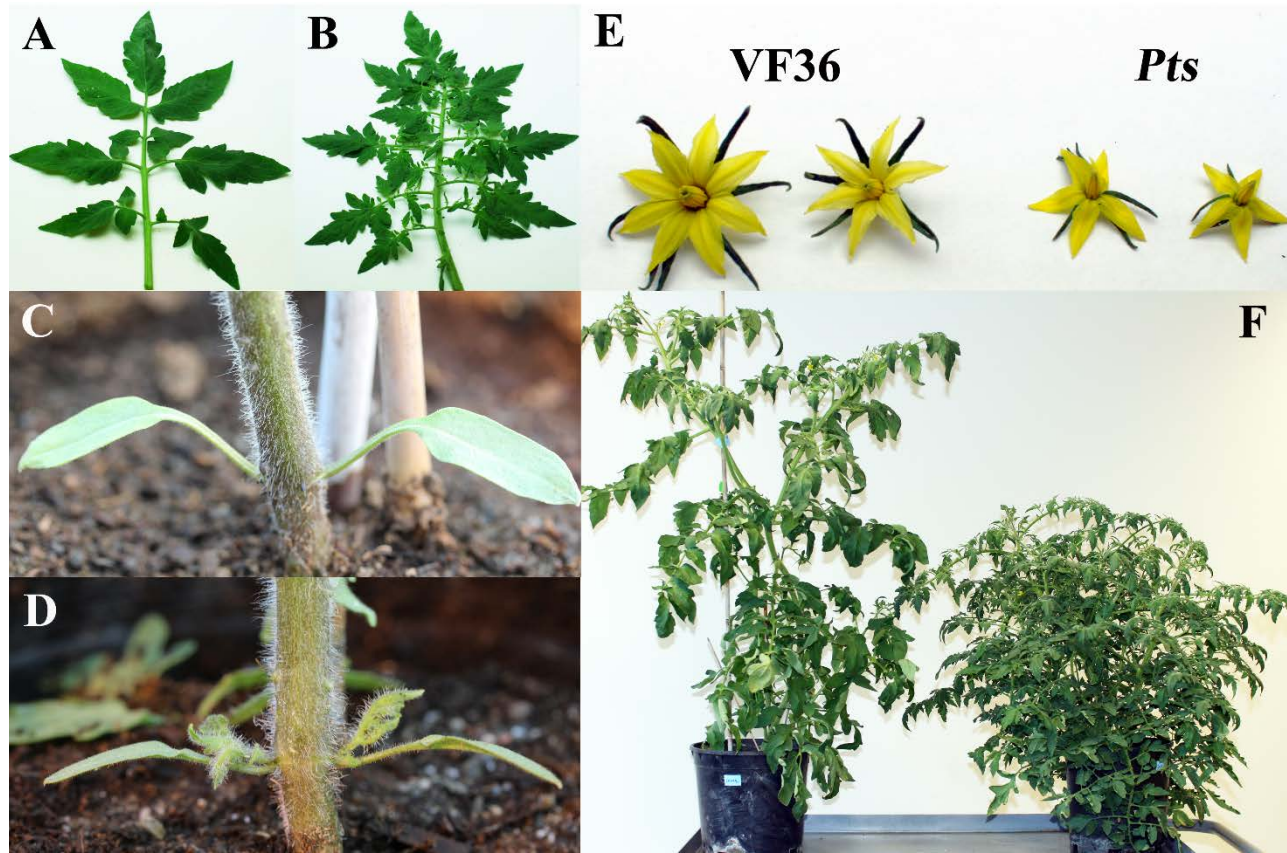
SL_TC215273	Auxin-regulated protein	2.0
SL_BP901371	Aquaglyceroporin; tonoplast intrinsic protein (TIPa)	2.0
SL_TC207224	Auxin response factor 2	2.0
SL_TC198378	Aux/IAA4	2.0

**Table S4. List of auxin related genes that are down-regulated in *TAPG4::antisense KD1* plants**

<b>Accession</b>	<b>Description</b>	<b>Ratio (<i>TAPG4::antisense KD1</i>/WT)</b>
SL_TC214499	Auxin-induced protein 5NG4	0.5
SL_TZXJ369TF	Auxin response factor 5	0.5
SL_BF097763	Auxin response factor 8	0.5
SL_TC197872	PIN-like 3	0.5
SL_DB726452	Auxin-induced protein	0.5
NM_001247676	Auxin response factor 19	0.5
SL_TC192465	Auxin response factor 3	0.4
SL_TC202675	Auxin-regulated protein	0.4
SL_AW929186	IAA-amino acid hydrolase ILR1 precursor	0.3
SL_AI781477	IAA-amino acid hydrolase ILR1 precursor	0.3

**Table S5. Primers used for Quantitative PCR analysis.**

Annotation	Primer set	
	Forward primer (5'-3')	Reverse primer (5'-3')
KD1	GCTCACTCACAATGGATCAACC	GATGGAGTGGAAGTAGAAGTAGGAAGTTC
PIN-likes 3 (SL_TC197872)	GAGGCTCCATTGCATGTCATC	AACCAACCCAAAATGGCGTG
PIN9 (HQ127075)	TCCTGAGGCATCACCATAACA	TCATTGCTTCCAACAATCCA
IAA2 (SL_NP000208)	TCGATCCTATCGAAAGAACATTT	ACATCCGTTGTATCCATCTGTTT
IAA4 (SL_TC198378)	CTTGTCGGTGATGTCCCCTG	TCTGCTCCGACACTTTTCCA
SAUR (SL_TC202903)	AGAGAAGGCAAGTGTGGTGC	AGAGAAGGCAAGTGTGGTGC
GH3.3 (SL_TC192282)	ACAGGTCACAGGGTTTCAACA	GGAATGGTTTTGGTGTCCGC
ARF5 (SL_TZXJ369TF)	AATGCAATCTTTTGCAGAATAGC	CAGTAGGCGATAAAAATTCTGATG
ARF19 (NM_001247676)	GGCATGCTCTCCAGCTATGA	CCTACTGCACCACGCTTGTA



**Figure S1. Phenotypes of the *KDI* semi-dominant mutant *PETROSELINUM* (*Pts*).** (A) Leaf from wild type tomato (VF36); (B) leaf from *Pts* mutant; (C) Cotyledonary axils of VF36 plants and (D) *Pts* plants at day 30; (E) flowers from VF36 and *Pts* plants; (F) 70 day plants of VF36 (left) and *Pts* (right).