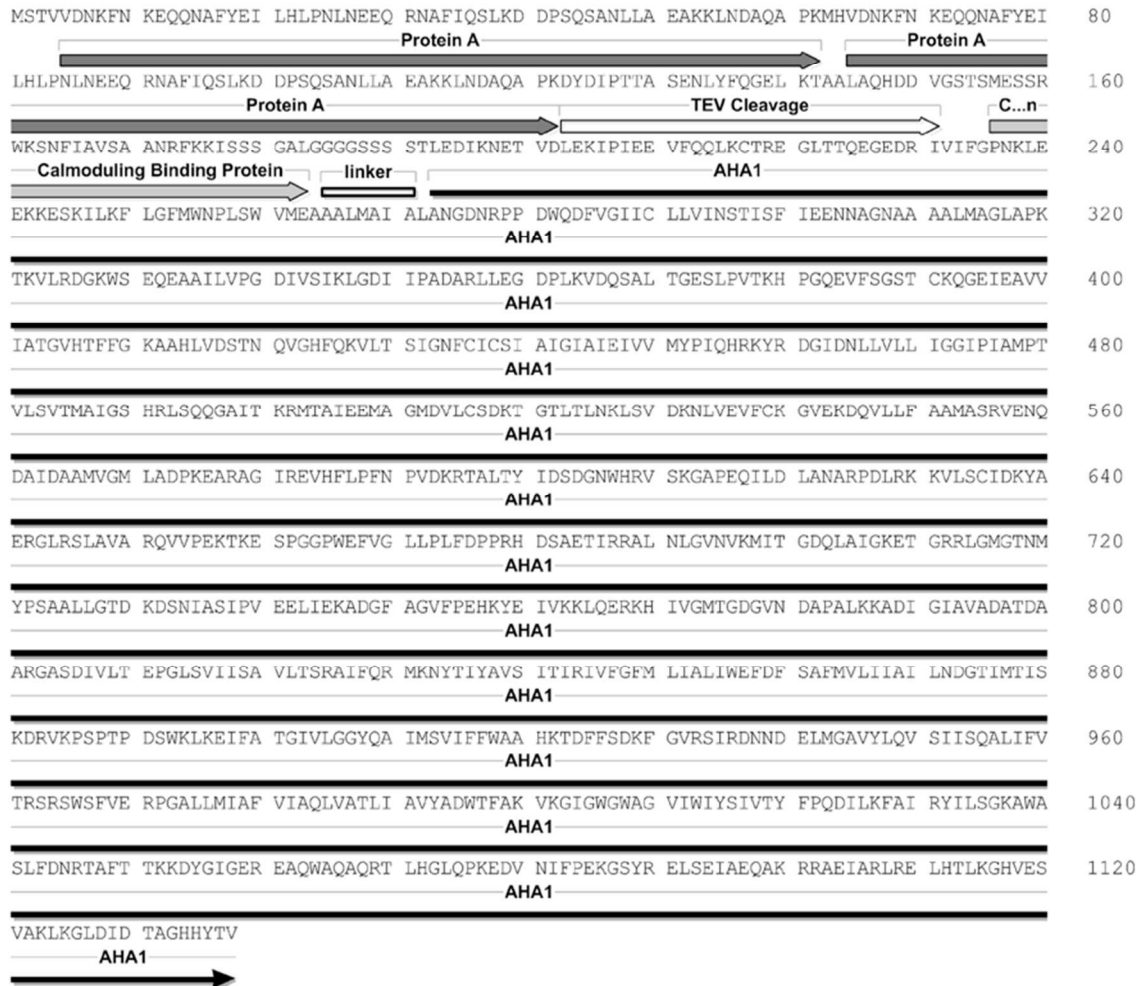
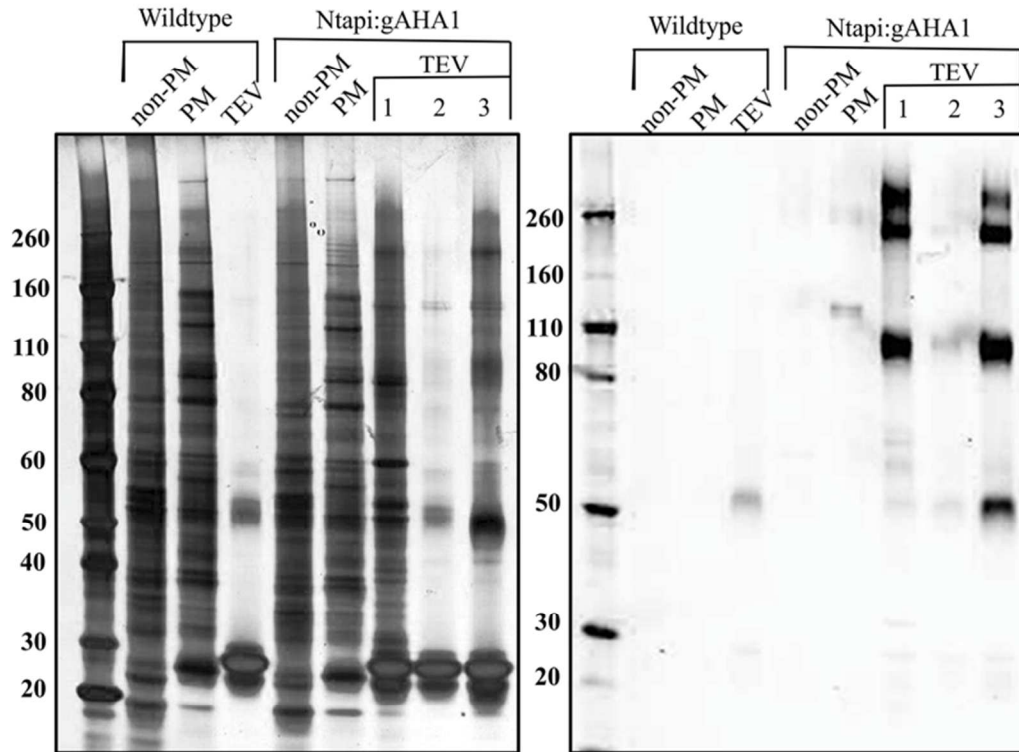


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 EKKEKILKF LGFMWNPLSW VMEAAALMAI ALANGDNRPP DWQDFVGIIC LLVINSTISF IEENNAGNAA AALMAGLAPK 320  
 TKVLRDGKWS EQEAAILVPG DIVSIKLGDI IPADARLLEG DPLKVDQSAL TGESLPVTKH PGQEVFSGST CKQGEIEAVV 400  
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 VLSVTMAIGS HRLSQQGAIT KRMTAIEEMA GMDVLCSDKT GTLTLNKLVS DKNLVEVFCK GVEKDQVLLF AAMASRVENQ 560  
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 YPSAALLGTD KDSNIASIPV EELIEKADGF AGVPPEHKYE IVKKLQERKH IVGMTGDGVN DAPALKKADI GIAVADATDA 800  
 ARGASDIVLT EPGLSVIISA VLTSRAIFQR MKNYTIYAVS ITIRIVFGFM LIALIWEFDF SAFMVLIIAI LNDGTIMTIS 880  
 KDRVKPSPTP DSWKLKEIFA TGIVLGGYQA IMSVIFWAA HKTDFFSDF GVSIRDND ELMGAVYLQV SIISQALIFV 960  
 TRSRWSFVE RPGALLMIAF VIAQLVATLI AVYADWTFK VKGIGWGAG VIWIYSIVTY FPQDILKFAI RYILSGKAWA 1040  
 SLFDNRFTAFT TKKDYGIGER EAQWAQART LHGLQPKEDV NIFPEKGSYR ELSEIAEQAK RRAEIARLRE LHTLKGHVES 1120  
 VAKLKGLDID TAGHHYTV  
 AHA1

**Supplemental Figure S1:** Full amino acid sequence of the predicted expressed Ntapi:AHA1 protein.



**Supplemental Figure S2.** Comparison of IgG resin washing conditions by Western blot.

100 $\mu$ g solubilized wildtype plasma membrane proteins were incubated with IgG purification resin, washed three times with 0.1% SDS and 150mM NaCl in resuspension buffer (330mM sorbitol, 5mM KCl, 5mM K<sub>2</sub>HPO<sub>4</sub> pH 7.8) followed by three times with 1X AcTEV buffer, and eluted overnight with AcTEV protease. Likewise, 100 $\mu$ g of solubilized Ntapi:gAHA1 plasma membrane proteins bound to and eluted from IgG resin; however, three washing conditions were tested as indicated: 1) two washes with 0.1% NP40, one wash with 0.1% NP40 and 0.01% SDS, and three washes with 1X AcTEV buffer, 2) three washes with 0.1% SDS and 150mM NaCl followed by three washes with 1X AcTEV buffer, and 3) three washes with 0.1% SDS followed by three washes with 1X AcTEV buffer. Proteins were eluted overnight with AcTEV protease, and eluted proteins were acetone precipitated and resuspended directly in Laemmli sample buffer

with reducing agent. 400ng of non-plasma membrane (non-PM) and plasma membrane (PM) wildtype or Ntapi:gAHA1 protein and half of TEV eluted proteins were loaded on 4-12% NuPAGE gels. Left panel is silver stained for total protein and right panel is a Western blot probed with rabbit anti-CBP followed by LICOR IRDye goat anti-rabbit. Markers indicated in kDa.

**Supplemental Table S1:** Total peptide identifications in soluble and plasma membrane fractions of metabolically labeled genotype pairs.

<b>Genotype Pairs (<sup>14</sup>N/<sup>15</sup>N)</b>	<b>Soluble -1<sup>a</sup></b>	<b>Soluble - 2<sup>b</sup></b>	<b>PM<sup>c</sup> - 1</b>	<b>PM - 2</b>
WT/WT - 1	1664	1751	1965	2180
WT/WT - 2	1490	1769	1803	1908
gAHA/WT	1311	1625	2181	1586
WT/gAHA	1337	1530	1860	1691
TAPa <sup>d</sup> /WT	1082	1399	1630	1361
WT/TAPa	1028	1197	2032	1505
TAPb <sup>e</sup> /WT	2490	--	2350	--
WT/TAPb	2395	--	2629	--

<sup>a</sup>First biological replicate <sup>b</sup>Second biological replicate <sup>c</sup>Plasma membrane <sup>d</sup>Ntapi:gAHA1a  
<sup>e</sup>Ntapi:gAHA1b

**Supplemental Table S2:** Total protein identifications in soluble and plasma membrane fractions of metabolically labeled genotype pairs.

<b>Genotype Pairs (<sup>14</sup>N/<sup>15</sup>N)</b>	<b>Soluble -1<sup>a</sup></b>	<b>Soluble - 2<sup>b</sup></b>	<b>PM<sup>c</sup> - 1</b>	<b>PM - 2</b>
WT/WT - 1	702	683	784	835
WT/WT - 2	635	700	738	702
gAHA/WT	547	649	823	624
WT/gAHA	553	627	754	679
TAP <sup>d</sup> /WT	443	593	688	581
WT/TAP	451	540	818	601
TAPb <sup>e</sup> /WT	809	--	722	--
WT/TAPb	785	--	819	--

<sup>a</sup>First biological replicate <sup>b</sup>Second biological replicate <sup>c</sup>Plasma membrane <sup>d</sup>Ntapi:gAHA1a  
<sup>e</sup>Ntapi:gAHA1b

**Supplemental Table S3:** Percent of proteins identified in soluble and plasma membrane metabolically labeled genotype pairs by increasing numbers of peptides.

	<b>Genotype Pairs</b> ( <sup>14</sup> N/ <sup>15</sup> N)	<b>1<sup>a</sup></b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6-10</b>	<b>11-15</b>	<b>16-20</b>	<b>&gt;20</b>
Soluble – 1 <sup>b</sup>	WT/WT – 1	51.1 <sup>c</sup>	19.5	12.0	5.7	3.4	7.0	0.9	0.3	0.1
	WT/WT – 2	50.9	21.7	10.9	4.7	4.1	6.0	1.4	0.2	0.2
	gAHA/WT	53.0	18.6	10.2	5.5	3.8	7.3	1.1	0.2	0.2
	WT/gAHA	51.0	19.3	11.6	5.8	3.6	7.1	1.1	0.4	0.2
	TAP <sup>d</sup> /WT	48.8	23.0	9.5	7.0	2.7	7.4	1.4	0.0	0.2
	WT/TAP	53.9	20.4	10.0	4.9	3.1	6.2	1.3	0.0	0.2
Soluble – 2 <sup>c</sup>	WT/WT – 1	47.9	21.2	11.3	5.4	4.4	7.6	1.6	0.4	0.1
	WT/WT – 2	50.1	20.1	10.0	6.6	3.9	6.3	2.6	0.3	0.1
	gAHA/WT	51.5	18.8	10.6	4.2	6.0	6.9	1.4	0.5	0.2
	WT/gAHA	51.4	19.1	10.5	6.4	4.1	6.7	1.1	0.5	0.2
	TAP/WT	54.5	18.7	9.3	5.1	4.2	6.9	0.8	0.3	0.2
	WT/TAP	54.6	20.9	8.3	5.4	4.1	5.6	0.9	0.0	0.2
PM <sup>f</sup> – 1	WT/WT – 1	52.0	18.6	10.2	5.5	3.8	7.7	1.4	0.4	0.3
	WT/WT – 2	53.5	18.4	10.0	5.4	3.7	6.8	1.5	0.3	0.3
	gAHA/WT	47.8	20.7	10.2	6.2	5.1	7.8	1.3	0.6	0.2
	WT/gAHA	53.2	18.7	9.2	6.2	4.0	6.0	1.2	0.7	0.1
	TAP/WT	57.1	16.7	8.0	5.7	4.1	6.1	1.5	0.6	0.3
	WT/TAP	52.4	18.5	8.9	7.1	3.3	7.8	1.2	0.4	0.4
PM – 2	WT/WT – 1	51.1	19.0	9.6	4.6	4.0	8.7	1.6	0.4	0.7
	WT/WT – 2	49.9	19.4	9.7	6.6	4.0	8.1	1.3	0.6	0.6
	gAHA/WT	49.8	21.5	9.9	5.4	4.2	6.7	1.3	0.6	0.5
	WT/gAHA	55.1	16.1	8.7	5.3	5.4	7.4	1.2	0.6	0.3

TAP/WT	54.4	19.1	10.7	5.0	2.9	5.7	1.5	0.3	0.3
WT/TAP	50.1	20.1	10.8	6.7	3.7	6.0	1.8	0.5	0.3

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<sup>a</sup>Number of peptides. <sup>b</sup>First biological replicate <sup>c</sup>Percent of total protein identifications  
<sup>d</sup>Ntapi:gAHA1a <sup>e</sup>Second biological replicate <sup>f</sup>Plasma membrane

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**Supplemental Table S4:** All AHA peptide identifications in IgG purified, TEV eluted

<sup>14</sup>N Ntapi:gAHA1/<sup>15</sup>N wildtype and reciprocal pairs. Provided as separate file.

**Supplemental Table S5:** Average ratio of 14-3-3 general regulatory factor proteins identified in metabolically labeled, Ntapi:gAHA1 vs. wildtype co-purification experiments.

	<sup>14</sup> Ntapi:gAHA1a/ <sup>15</sup> NWT <sup>a</sup>				<sup>14</sup> NWT/ <sup>15</sup> Ntapi:gAHA1a <sup>b</sup>		
	Exp <sup>c</sup> 1	Exp 2	Exp 3	Exp 4	Exp 1	Exp 2	Exp 3
<b>GRF1</b> <b>At4g09000</b>	1.15 (16) <sup>d</sup>	1.14 (11)	1.26 (8)	1.11 (12)	1.13 (9)	1.13 (10)	1.20 (6)
<b>GRF2</b> <b>At1g78300</b>	0.99 (11)	0.87 (7)	1.12 (7)	0.96 (6)	0.96 (2)	0.88 (6)	0.83 (5)
<b>GRF3</b> <b>At5g38480</b>	1.13 (19)	1.18 (13)	1.14 (14)	1.02 (21)	1.13 (8)	1.12 (14)	1.17 (9)
<b>GRF5</b> <b>At5g16050</b>	1.03 (3)	1.11 (1)	1.36 (1)	1.10 (2)	0.77 (2)	0.73 (1)	--
<b>GRF6</b> <b>At5g10450</b>	0.98 (6)	0.95 (2)	1.00 (3)	0.99 (4)	0.91 (5)	0.67 (3)	--
<b>GRF7</b> <b>At3g02520</b>	1.01 (2)	0.67 (1)	--	--	1.06 (2)	0.89 (2)	0.76 (1)
<b>GRF8</b> <b>At5g65430</b>	0.86 (9)	0.82 (5)	0.93 (8)	0.88 (3)	0.74 (7)	0.74 (4)	--
<b>GRF9</b> <b>At2g42590</b>	1.02 (11)	0.93 (3)	1.15 (7)	1.11 (8)	1.03 (11)	1.06 (9)	1.08 (4)
<b>GRF10</b> <b>At1g22300</b>	0.96 (16)	1.02 (10)	0.97 (11)	0.91 (11)	0.99 (10)	0.90 (13)	1.03 (4)

<sup>a</sup> <sup>14</sup>N Ntapi:gAHA1a/<sup>15</sup>N wildtype; <sup>b</sup> <sup>14</sup>N wildtype/<sup>15</sup>N Ntapi:gAHA1a; <sup>c</sup> Biological replicates; <sup>d</sup> number of peptides used to calculate average ratio