Comparison on main gene families among different genotypes

\****Bold Italic***: only on FLT for that genotype, \***Bold**: only on GC for that genotype

col\_FLT: EXO70 - ***ATEXO70D2, ATEXO70D1, ATEXO70H2***, ATEXO70A1, ATEXO70B1,

***ATEXO70H7***

VPS - ATVPS53, ATVPS52, VPS35B, \*VPS35A\*, VPS35C, VPS37-1, ATVPS33, VPS28-1,

VPS25, ATVPS54, ***VPS28***, VPS22, VPS26B, ***VPS24.1, VPS2.2***, VPS26A

SEC - KEU(SEC1), EMB30(SEC7p), SEC3A, SEC6, ***SEC5A***, ATSEC8, CEF(SEC24),

ATPHF1(SEC12), ***SEC15B***, SEC10

ARF - ARFB1C, AGD3, ARFB1B, ERMO1, ATARLB1

col\_GC1: EXO70 - ATEXO70A1, ATEXO70B1

VPS - ATVPS53, ATVPS52, VPS35B, **VPS2.1**, \*VPS35A\*, VPS35C, VPS37-1, ATVPS33,

VPS28-1, VPS25, ATVPS54, VPS22, VPS26B, **VPS20.2**, VPS26A

SEC - KEU(SEC1), EMB30(SEC7p), SEC3A, SEC6, ATSEC8, CEF(SEC24), ATPHF1(SEC12),

SEC10

ARF - ARFB1C, AGD3, ARFB1B, ERMO1, ATARLB1

col\_GC2: EXO70 - NA

VPS - VPS28, \*ATSNX1(VPS5, PIN2)\*, VPS24.1, VPS2.2

SEC - ATSEC22, AtSEC24A, \*SEC31B\*

ARF - AGD7, ARFC1, \*ATMIN7\*, AGD8, AGD9, AGD5

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phyD\_FLT: EXO70 - ATEXO70A1

VPS - ATVPS53, ATVPS52, VPS2.1, \*VPS35A\*, ATVPS33, VPS25, ATVPS54, VPS28,

VPS24.1, VPS2.2, VPS26A

SEC - ATSEC22, KEU(SEC1), EMB30(SEC7p), SEC6, ATPHF1(SEC12), SEC10

ARF - AGD7, ARFC1, AGD8, AGD3, ERMO1, AGD9, ATARLB1

+) [‘ADL1E’](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC197301/) only for WS\_FLT

WS\_FLT: EXO70 - ATEXO70D2, ATEXO70A1, ATEXO70B1

VPS - ATVPS53, ATVPS52, VPS35B, VPS2.1, \*VPS35A\*, VPS35C, VPS37-1, ATVPS33,

***VPS28-1***, VPS25, ***ATVPS54***, VPS28, VPS22, VPS26B, VPS24.1 VPS2.2, VPS26A

SEC - KEU(SEC1), EMB30(SEC7p), SEC3A, SEC6, AtSEC24A, ATSEC8, CEF(SEC24),

ATPHF1(SEC12), SEC15B, SEC10

ARF - AGD7, ***ARFB1C***, AGD8, AGD3, ARFB1B, ERMO1, AGD9, ATARLB1

WS\_GC: EXO70 - ATEXO70D2, **ATEXO70H1,** ATEXO70A1, ATEXO70B1

VPS - ATVPS53, ATVPS52, VPS35B, **ATVPS11**, VPS2.1, \*VPS35A\*, VPS35C, VPS37-1,

ATVPS33, VPS25, VPS28, VPS22, VPS26B, VPS24.1, VPS2.2, VPS26A

SEC - **ATSEC22**, KEU(SEC1), EMB30(SEC7p), SEC3A, SEC6, ATSEC24A, ATSEC8, CEF,

ATPHF1, SEC15B, SEC10

ARF - AGD7, AGD8, AGD3, ARFB1B, ERMO1, AGD9, ATARLB1, **AGD5**

Gravitropism related genes:

Col\_FLT: ATVAM2, AP3M

Col\_GC: ATVAM2, AP3M / ATVTI11

phyD\_FLT: ATVTI11

WS\_FLT: ATVAM2, AP3M, ATVTI11

WS\_GC: ATVAM2, ATVTI11