

ESI 2. Reporter proteins identified in response to change in the copper level, deletion of *CCC2* gene and their interacting effect.

Effector	# of Reporter Proteins (p-value<0.05)	Enriched Biological Process terms (p-value< 0.01)	TOP 10 Reporter Proteins
Mutant Effect	270	proteolysis response to stress cellular catabolic process phytosteroid biosynthetic process macromolecule catabolic process ubiquitin-dependent protein catabolic process	RPT5 RPN10 RPN1 RPN11 HEK2 IGO1 BRE5 RAD10 ATP4 NPA3
Copper Effect	162	phytosteroid biosynthetic process cortical actin cytoskeleton organization nitrogen compound transport negative regulation of catabolic process actin filament-based process endocytosis vacuolar transport vesicle-mediated transport hydrogen transport ion transport	TOR2 TOR1 FMP45 SYP1 SHE2 RSP5 CHC1 RPN11 SPS1 SRO9

Interaction Effect	193	ubiquitin-dependent protein catabolic process protein complex biogenesis macromolecule catabolic process vitamin B6 biosynthetic process cytoplasmic translation ATP biosynthetic process proton transport hydrogen transport heterocycle biosynthetic process aromatic compound biosynthetic process cellular nitrogen compound biosynthetic process nucleotide metabolic process anti-apoptosis cellular macromolecule metabolic process	VTC1 ATP4 RPF2 PET9 ATP6 RPT6 RPT5 HSM3 FCJ1 MAP1
--------------------	-----	---	--