

Supplementary Table 1: Data summary of main findings in the different model systems

	ER-mito association	CCh [Ca ²⁺] _c vs mt	SOCE [Ca ²⁺] _c vs mt
WT	-	-	-
Opa1 ^{-/-}	Increased	Leftward shift	Rightward shift
Opa1 ^{-/-} + OPA1	Rescued	Partial rescue	Rescued
Patient cells			
Control	-	-	ND
c.870+5g>a	Increased	Partial leftward Shift	ND
c.889c>t	Increased	Partial leftward Shift	ND
c.2713c>t	Unchanged	Partial leftward Shift	ND
c.2818+5g>a	Increased	ND	ND
Mutants rescue (OPA1 KO MEFs background)			
Opa1 ^{-/-}	Increased	Leftward shift	Rightward shift
+OPA1 WT	ND	Partial rescue	Rescued
c.870+5g>a	ND	Partial rescue	Rescued
c.889c>t	ND	Partial rescue	Rescued
c.1334g>a	ND	Partial rescue	Rescued
c.2708delTTAG	ND	Not rescued	Rescued
c.2713c>t	ND	Not rescued	Rescued
c.2818+5g>a	ND	Not rescued	Not rescued
Mutants overexpression (WT MEFs background)			
WT	-	-	-
+OPA1 WT	ND	Unchanged	ND
c.870+5g>a	ND	Leftward shift	ND
c.889c>t	ND	Unchanged	ND
c.1334g>a	ND	Leftward shift	ND
c.2708delTTAG	ND	Leftward shift	ND
c.2713c>t	ND	Unchanged	ND
c.2818+5g>a	ND	Leftward shift	ND

ND: not determined

