

Table S3. Mitochondrial energetics and ROS-induced-ROS-release model (ME-RIRR): states variables initial values (mM).

Symbol	Description	Value
[ADP] _m	Mitochondrial ADP concentration	0.0097
[NADH]	Mitochondrial NADH concentration	2.084
$\Delta\Psi_m$	Inner mitochondrial membrane potential	- 124.7
[ISOC]	Isocitrate concentration (mitochondrial)	0.108
[α KG]	α ketoglutarate concentration (mitochondrial)	2.596×10^{-4}
[SCoA]	Succinyl CoA concentration (mitochondrial)	0.89
[Suc]	Succinate concentration (mitochondrial)	4.88×10^{-4}
[FUM]	Fumarate concentration (mitochondrial)	0.0103
[MAL]	Malate concentration (mitochondrial)	0.0038
[OAA]	Oxalacetate concentration (mitochondrial)	4.743×10^{-8}
[O ₂ ⁻] _i	O ₂ ⁻ concentration (cytoplasmic)	1.192×10^{-8}
[O ₂ ⁻] _m	O ₂ ⁻ concentration (mitochondrial)	0.0238
[H ₂ O ₂]	Hydrogen peroxide (cytoplasmic)	8.821×10^{-9}
[GSH]	Reduced glutathione (cytoplasmic)	0.841
[Ca ²⁺] _m	Calcium concentration (mitochondrial)	1.132×10^{-4}