Mutants	changes in the structure - deleted paths	phenotypes	comments
anti-oxidants	no changes	000 (naive) 001 (necrosis) 010 (survival) 100 (apoptosis)	similar to WT
APAF1 del	CASP3 => CASP3	000 (naive) 001 (necrosis) 010 (survival)	loss of apoptosis, equivalent to a deletion of CASP3
Bax del	CASP3 => CASP3 (paths 4, 5)	000 (naive) 001 (necrosis) 010 (survival)	loss of apoptosis
Bcl2 op	MPT =0 & CASP3 => CASP3 (paths 4, 5)	000 (naive) 010 (survival)	loss of apoptosis and necrosis
Casp8 del	CASP3 => CASP3 (paths 4, 5) & CASP3 - MPT (path 17)	000 (naive) 001 (necrosis) 010 (survival)	loss of apoptosis
Casp8 op	NFkB => NFkB (paths 2, 3) & CASP3 - MPT (path 17) & MPT - NFkB (path 13)	000 (naive) 001 (necrosis) 100 (apoptosis)	loss of survival, similar to cFLIP del and RIP1 del
cFLIP del	NFkB => NFkB (paths 2, 3) & CASP3 - MPT (path 17) & MPT - NFkB (path 13)	000 (naive) 001 (necrosis) 100 (apoptosis)	loss of survival, similar to Casp8 op and RIP1 del
cIAP del	NFkB => NFkB (paths 2, 3) & MPT - NFkB (path 13)	000 (naive) 001 (necrosis) 100 (apoptosis)	loss of survival
FADD del	CASP3 => CASP3 (paths 4, 5) & CASP3 - MPT (path 17)	000 (naive) 001 (necrosis) 010 (survival)	loss of apoptosis
NFkB del	NFkB=0 (paths 2, 3)	000 (naive) 001 (necrosis) 100 (apoptosis)	loss of survival
NFkB op	CASP3 => CASP3 MPT => MPT	000 (naive) 010 (survival)	loss of cell death
RIP1 del	NFkB => NFkB (paths 2, 3) & CASP3 - MPT (path 17) & MPT - NFkB (path 13)	000 (naive) 001 (necrosis) 100 (apoptosis)	loss of survival, similar to Casp8 op and cFLIP del (In the full model, necrosis disappears as well)
XIAP del	no changes	000 (naive) 001 (necrosis) 010 (survival) 100 (apoptosis)	similar to WT
z-VAD-fmk	CASP3 => CASP3	000 (naive) 001 (necrosis) 010 (survival)	loss of apoptosis

Supp. Table S2. List of mutants simulated with the conceptual 3-node model.