Minimal model of MMP2 activation via MMP3, inhibited by TSP1

ODEs:
d_pM2_dt = (-ReactionFlux1)
d_M3_dt = (-ReactionFlux1 + ReactionFlux2 - ReactionFlux3)
d_M3_pM2_dt = (ReactionFlux1 - ReactionFlux2)
d_M2_dt = (ReactionFlux2)
d_TSP1_dt = (-ReactionFlux3)
d_M3_TSP1_dt = (ReactionFlux3)

Fluxes:
ReactionFlux1 = (kon_M3_pM2*M3*pM2-koff_M3_pM2*M3_pM2)
ReactionFlux2 = (kact*M3_pM2)
ReactionFlux3 = (kon_M3_TSP1*M3*TSP1-koff_M3_TSP1*M3_TSP1)

Parameter Values:
koff_M3_pM2 = 0.001
kon_M3_pM2 = 10000
kact = 0.0019
koff_M3_TSP1 = 2.1e-3
kon_M3_TSP1 = 1e+05
activeM9 = 0
foldChangeMMP9 = 0
M9_M = 0

Initial Conditions:
pM2 = 5.43e-09
M3 = 1.85e-08
M3_pM2 = 0
M2 = 0
TSP1 = 1.47e-07
M3_TSP1 = 0