

Inhibition (-) Activation (+) of SDH

Rapamycin, Naringin boost SDH expression

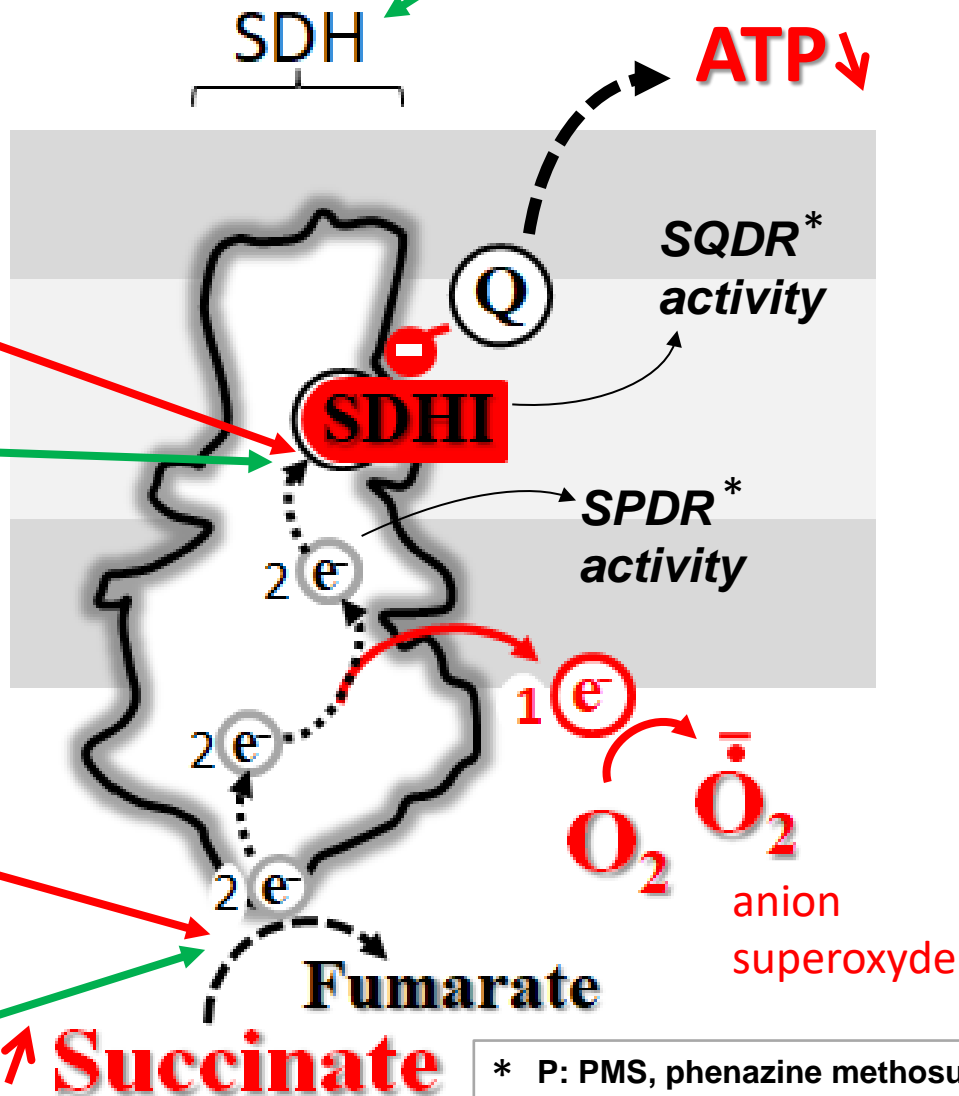
SDHI

TTFA thenoyltrifluoroacetone
Tocopheryl-succinate
Cyenopyrafen
Cyflumetofen
Pyflubumide
Atpenin 5a

QH_2

Oxaloacetate
Malonate
Dimethyl malonate
Malate
3 Nitropropionate

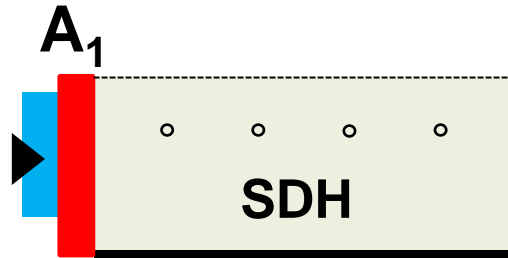
ATP



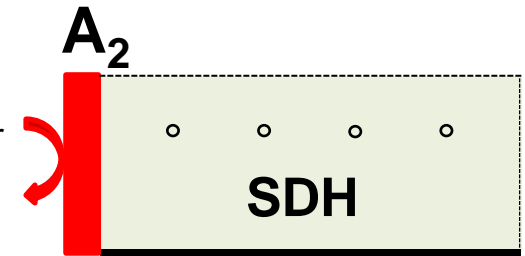
* P: PMS, phenazine methosulfate
D: DCPIP, dichlorophenolindophenol

SDH redox status and superoxides

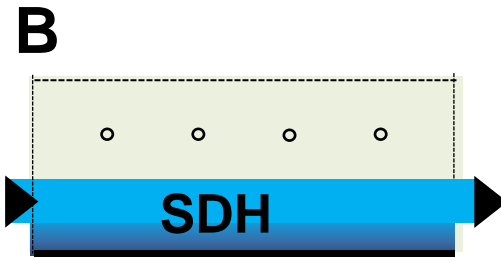
High malonate:
Flux stopped
Enzyme oxidized
No superoxides



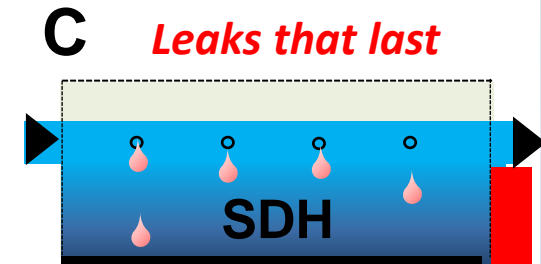
With time, succinate
accumulation signal for
metabolic derivation
SDH oxidized



Enzyme working
freely, no succinate
SDH partially reduced,
No superoxides

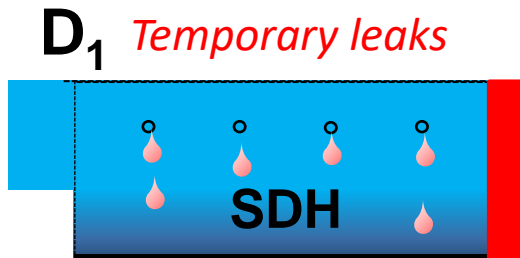


Low SDHI, SDH
Largely reduced,
no succinate
Superoxides +++



Similar fluxes

High SDHI:
Flux stopped
Enzyme reduced
Superoxides +++



With time, succinate
accumulation signal for
metabolic derivation
SDH oxidized

