Inhibitors of mitochondrial electron and substrate transport, and agents acting on ion transport.

Inhibitor	Conc.	Effect
		Complex I: NADH dehydrogenase, FMN, Fe/S centres
rotenone	5 μM	inhibition of NADH-DH.
	10 μM	muscle fibers (Gellerich et al.).
amytal		inhibition of NADH-DH; barbiturate drug.
piericidine		competitive inhibitor of NADH-DH, ubiquinone structure; antibiotic.
		Complex II: Succinate dehydrogenase, FAD, Fe/S, *b*-type haem
malonate		competitive inhibition of SDH.
		Complex III: Cytochrome bc_1, Rieske Fe/S
antimycin A		blocks between cyt *b* to cyt *c*; antibiotic;
	6.5 μM	for permeablized muscle fibers (Gellerich et al.).
myxothiazol		inhibits also Complex I (Lenaz)
		Complex IV: Cytochrome aa_3 oxidase, Cu ions
cyanide azide sulfide CO	1 mM	
NO		competitive inhibitor of COX.
		Uncouplers
DNP FCCP CCCP		
		Ion transport
oligomycin	1 $\mu g \cdot mg^{-1}$ P	inhibition of H^+ transport through ATPase.
valinomycin	150 $ng \cdot mg^{-1}$ P	catalyzes electrogenic K^+ transport down the electrochemical transmembrane gradient.
nigericin	27 $pmol \cdot mg^{-1}$ P	catalyzes K^+/H^+ antiport.
mersalyl		inhibition of P_i symporter.
N-ethylmaleimide		blocks endogenous P_i transport.
		Substrate transport
carboxyatractyloside	10 μM	inhibition of adenlyate translocase.
α-cyanohydroxycinnamate	0.65 mM	inhibition of pyruvate transport.
phenylsuccinate	20 mM	competitive inhibition of succinate transport.