

A UNIQUE MODE OF REGULATION AND PHYSIOLOGICAL ROLE OF NCLX IN MITOCHONDRIAL Ca²⁺ SIGNALING

GUEST LECTURE by



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3D model of NCLX.

Roy et al. (2017) Biochim Biophys Acta. 1864:997-1008





PKA phosphorylation of NCLX reverses mitochondrial Ca²⁺ overload and depolarization, promoting survival of PINK1-deficient dopaminergic neurons. Kostic et al. (2015) Cell Reports. 13:376-86



Allosteric regulation of NCLX by mitochondrial membrane potential links the metabolic state and Ca²⁺ signaling in mitochondria. Kostic et al. (2018) Cell Rep. 25:3465-75

NCLX controls SOCE activity. Nissim et al. (2017) EMBO J. 36:797-815