Cellular and Molecular Biology
ISSN: 1165-158X

The Role of Cell Cycle for Formation of Mitochondria

Shankar Banerjee*

Department of Cell Science, University of Hyderabad, India

In all eukaryotes, prior mitochondria are utilized as formats to fabricate more mitochondrial mass, in front of cell division or in light of expanded metabolic interest. All proteins imported across the outer mitochondrial membrane enter through a protein translocase known as the TOM complex during mitochondrial biogenesis, which necessitates the import of up to 1,000 distinct proteins into the organelle. is complex is a momentous nano-machine made out of a center framed by the β-barrel channel Tom40 and extra subunits, every one of which has a solitary α-helical transmembrane fragment [1].

Tail-anchored proteins make up Tom5, Tom6, Tom7, and Tom22, the subunits that surround the Tom40 barrel. It is certain that Tom7 and Tom22 existed in the earliest stages of mitochondrial evolution

protein can be targeted to the right membrane and assembled into the membrane. e mRNA-localizing protein Puf3 and the localized translation of membrane proteins at the mitochondrial surface are two of the mechanisms that play a role in regulating the e ectiveness of targeting and assembly of mitochondrial membranes [4]. In the new review, Harbauer currently show that, on account of Tom6, a key administrative component is applied through the cyclin-subordinate kinase CDK1, an expert controller of the cell cycle in all eukaryotes, with CDK1 intervening cell-cycle-subordinate phosphorylation of Tom6.

e serine residue at position 16 in Tom6 was among the TOM complex's phosphorylation sites that Schmidt had previously discovered and catalogued. Casein kinase 2 and the cAMP-dependent protein kinase mediate some of these phosphorylation events in response to various environmental stimuli. Harbauer created biochemical

***Corresponding author:** Shankar Banerjee, Department of Cell Science, University of Hyderabad, India, E-mail: banerjee.shankar@gmail.com

Received: 20-Mar-2023, Manuscript No: CMB-23-99261, **Editor assigned:** 22-Mar-2023, PreQC No: CMB-23-99261(PQ), **Reviewed:** 12-Apr-2023, QC No: CMB-23-99261, **Revised:** 22-Apr-2023, Manuscript No: CMB-23-99261(R), **Published:** 01-May-2023, DOI: 10.4172/1165-158X.1000269

Citation: Banerjee S (2023) The Role of Cell Cycle for Formation of Mitochondria. Cell Mol Biol, 69: 269.