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Characterization of the nuclear import pathway for BLM protein

Zhiqiang Duan, Jiafu Zhao, Houqiang Xu, Haixu Xu, Xinqin Ji, Xiang Chen, Jianming Xiong

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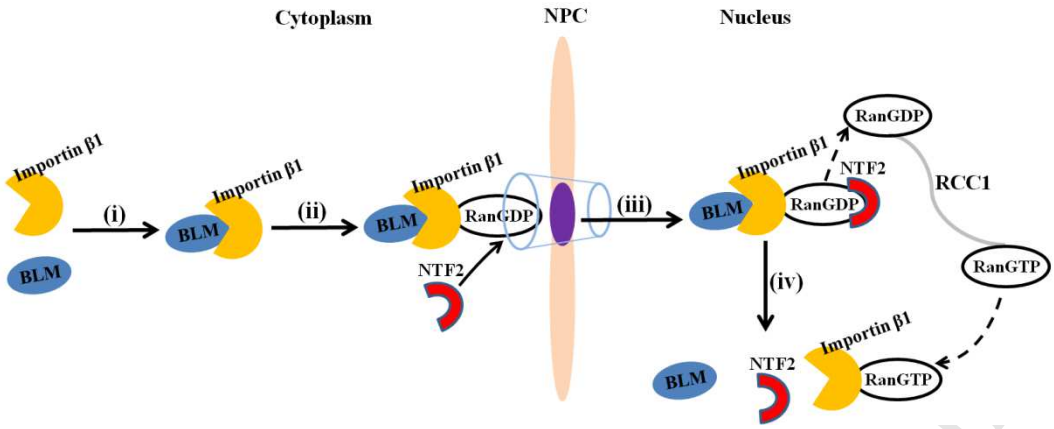

BLM enters the nucleus via the importin β1, RanGDP and NTF2 dependent pathway. (i) Importin β1 forms a binary complex with BLM in the cytoplasm. (ii) The ternary complex is formed by binging of RanGDP to importin β1 and stocks at the nuclear pore complex (NPC). (iii) NTF2 binds RanGDP and triggers the nuclear import of the ternary complex. (iv) Inside the nucleus regulator of chromosome condensation 1 (RCC1) exchanges GDP with GTP on Ran, generating importin β1/RanGTP complex and releasing BLM and NTF2.