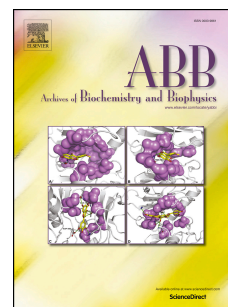


# Accepted Manuscript

Characterization of the nuclear import pathway for BLM protein

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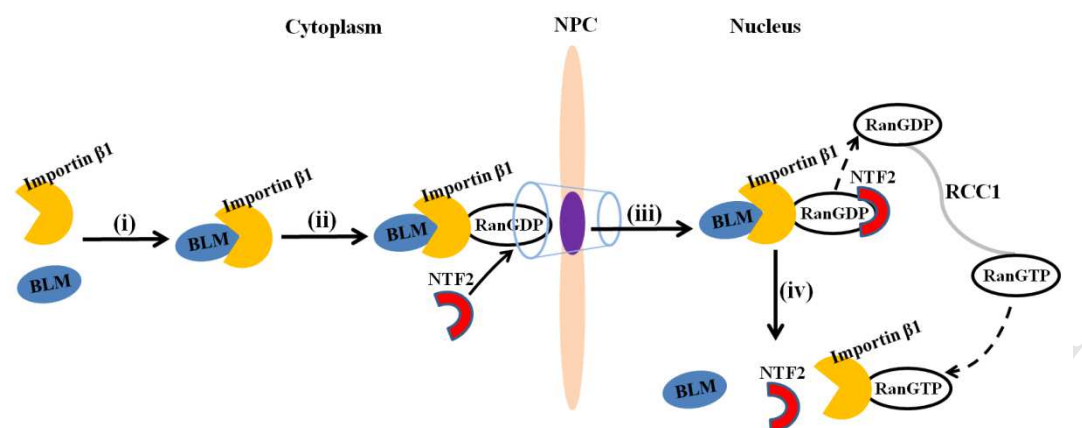
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BLM enters the nucleus via the importin  $\beta$ 1, RanGDP and NTF2 dependent pathway. (i) Importin  $\beta$ 1 forms a binary complex with BLM in the cytoplasm. (ii) The ternary complex is formed by binding of RanGDP to importin  $\beta$ 1 and stocks 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  $\beta$ 1/RanGTP complex and releasing BLM and NTF2.

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