

Thioredoxin-related transmembrane protein 2 (TMX2) regulates the Ran protein gradient
and importin- β -dependent nuclear cargo transport.

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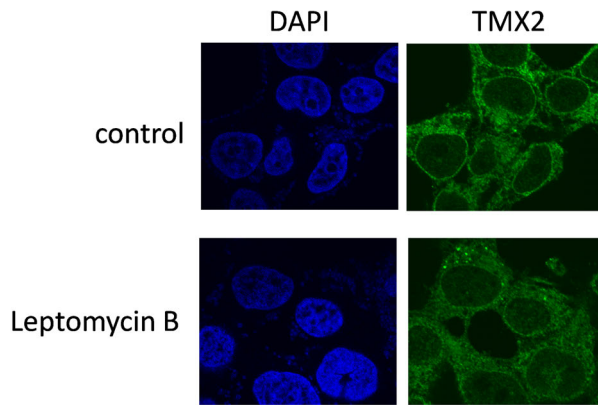
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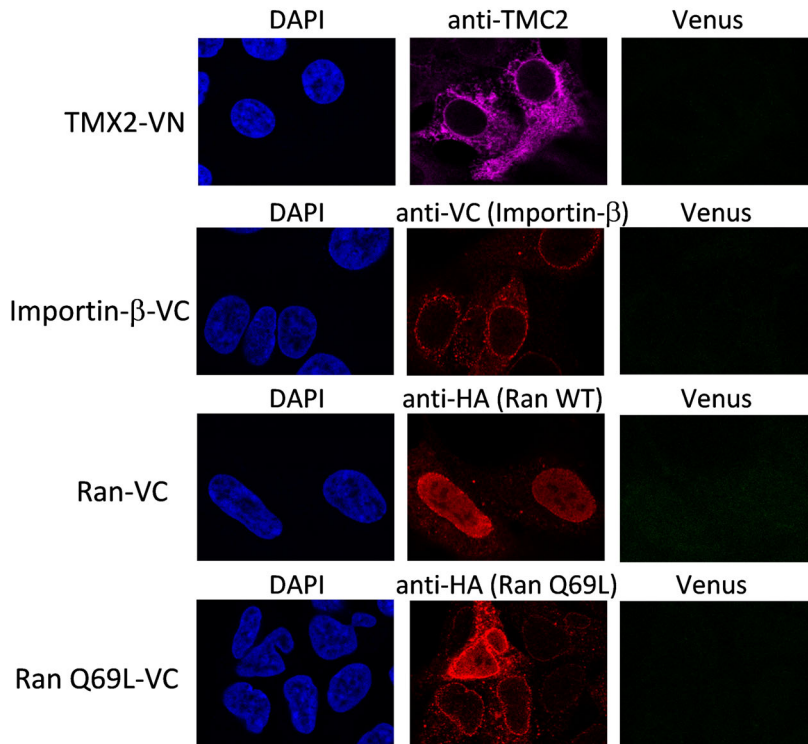
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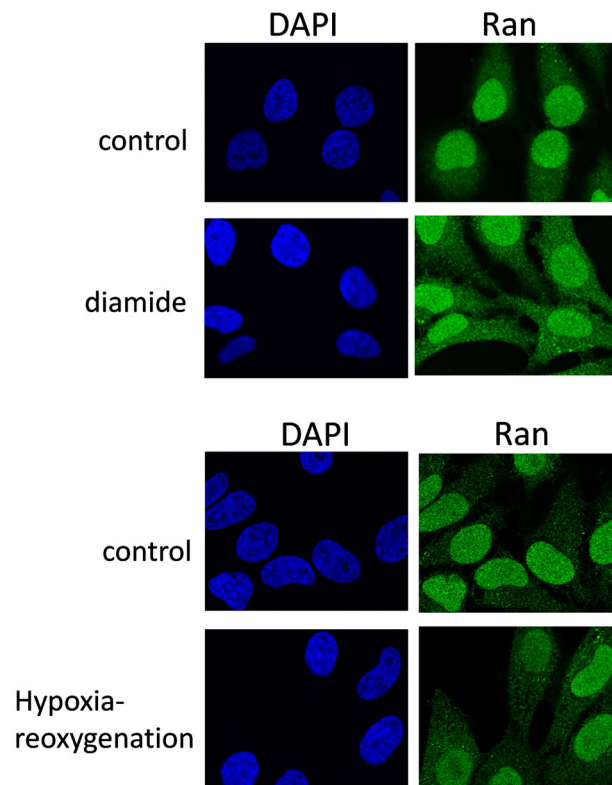
Supplementary Figure S1

TMX2 did not accumulate in the nucleus in the presence of Leptomycin B. HEK293 cells were treated with 10 nM Leptomycin B for 6 h, and localization of endogenous TMX2 was observed by immunofluorescence microscopy.



Supplementary Figure S2

VN- or VC- fusion proteins do not emit Venus fluorescence by itself. TMX2-VN, importin- β -VC, HA-RanWT-VC, or HA-RanQ69L-VC was expressed alone in HEK293 cells, and the overexpression of these proteins were confirmed by anti-TMX2, anti-VC, or anti-HA antibody.



Supplementary Figure S5

Diamide, or hypoxia-reoxygenation decreased nuclear Ran levels.

HeLa cells were treated with 200 μ M diamide for 1 h, or cultured under 1% hypoxia for 4 h followed by reoxygenation with 21% oxygen for 20 min, and localization of Ran was observed by immunofluorescence microscopy.