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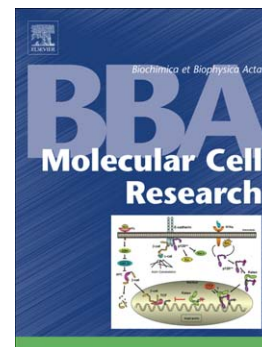
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Rapamycin requires AMPK activity and p27 expression for promoting autophagy-dependent Tsc2-null cell survival

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Running title: AMPK/p27 and rapamycin-induced autophagy

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Abbreviations: AMPK, 5' AMP-activated protein kinase; Atg13, autophagy-related protein 13; CDK, cyclin-dependent kinase; DAPI, 4',6-diamidino-2-phenylindole; DMEM, dulbecco's modified eagle's medium; DMSO, dimethyl sulfoxide; FDA, US Food and Drug Administration; GFP, green fluorescent protein; LAM, lymphangioliomyomatosis; LC3, microtubule-associated protein light Chain 3; LKB1, liver kinase B1; MEK1/2, mitogen-activated protein kinase kinase 1/2; mTORC1, mammalian/mechanistic target of rapamycin complex 1; NADPH: nicotinamide adenine dinucleotide phosphate; p27, cell-cycle inhibitor p27Kip1; p27CT, carboxy-terminus of p27; p27NT, amino-terminus of p27; PPP, pentose phosphate pathway; S6, ribosomal protein S6; TSC, tuberous sclerosis complex.

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