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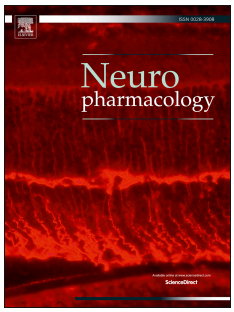

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The novel, catalytic mTORC1/2 inhibitor PQR620 and the PI3K/mTORC1/2 inhibitor PQR530 effectively cross the blood-brain barrier and increase seizure threshold in a mouse model of chronic epilepsy

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Abbreviations

AKT, protein kinase B; ASD, anti-seizure drug; 4E-BP1, initiation factor 4E binding protein; HPβCD, hydroxypropyl-ß-*cyclodextrin; MTD, maximal tolerated dose;* MES-T, maximal electroshock seizure threshold; mTORC, mammalian target of rapamycin complex; PBS, phosphate buffered saline; PI3K, phosphoinositide 3-kinase; PK, pharmacokinetics; rictor, rapamycin-insensitive companion of mammalian target of rapamycin; S6K, ribosomal S6 kinase; S6-rp, S6 ribosomal protein; SE, status epilepticus; TID, threshold increasing dose; TLE, temporal lobe epilepsy; TSC, tuberous sclerosis complex; ULK, UNC-5 like autophagy activating kinase complex.