## Accepted Manuscript

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PII: DOI: Reference:	S0925-4439(16)00006-5 doi: 10.1016/j.bbadis.2016.01.005 BBADIS 64402
To appear in:	BBA - Molecular Basis of Disease
Received date:	17 September 2015

Revised date: 10 December 2015 Accepted date: 4 January 2016

Please cite this article as: Asma Lamine-Ajili, Ahmed M. Fahmy, Myriam Létourneau, David Chatenet, Patrick Labonté, David Vaudry, Alain Fournier, Effect of the pituitary adenylate cyclase-activating polypeptide on the autophagic activation observed in *in vitro* and *in vivo* models of Parkinson's disease, *BBA - Molecular Basis of Disease* (2016), doi: 10.1016/j.bbadis.2016.01.005

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## **ACCEPTED MANUSCRIPT**

Effect of the pituitary adenylate cyclase-activating polypeptide on the autophagic activation observed in *in vitro* and *in vivo* models of Parkinson's disease<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> **Abbreviations:** Akt: protein kinase B; Bcl-2: B-cell lymphoma 2 anti-apoptotic protein; DA: dopaminergic; DAPI: 2-(4-Amidinophenyl)-1H-indole-6-carboxamidine hydrochloride; FBS: fetal bovine serum; GFP: green fluorescent protein; JNK: c-Jun N-terminal kinase; LC3 I and II: microtubuleassociated protein light chain 3 I and II; MAPK: mitogen-activated protein kinase; MPP<sup>+</sup>: 1-methyl-4phenylpyridinium; MPTP: 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine; MTP: mitochondrial transmembrane potential; MTS: 3-(4,5-dimethylthiazol-2-yl)-5-(3-carboxymethoxyphenyl)-2-(4sulfophenyl)-2H-tetrazolium; PAC1: PACAP receptor; PACAP: pituitary adenylate cyclase-activating polypeptide; PACAP38 or P38: 38-amino acid isoform of PACAP; PD: Parkinson's disease; PFA: paraformaldehyde; ROS: reactive oxygen species; SN: *substantia nigra*; SNpc: *substantia nigra pars compacta*; TBST: Tris-buffered saline with Tween 20; TH: tyrosine hydroxylase; VIP: vasoactive intestinal peptide; VPAC1: VIP/PACAP type 1 receptor; VPAC2: VIP/PACAP type 2 receptor.

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