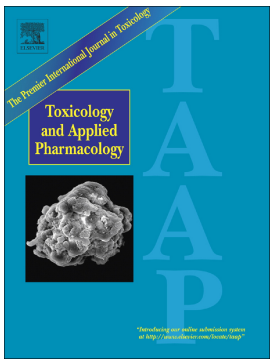

Inflammatory mediators resulting from transglutaminase 2 expressed in mast cells contribute to the development of Parkinson's disease in a mouse model

Gwan Ui Hong, Jin Whan Cho, Soo Youl Kim, Joo Ho Shin, Jai Youl Ro

PII: S0041-008X(18)30403-4
DOI: doi:10.1016/j.taap.2018.09.003
Reference: YTAAP 14382

To appear in: *Toxicology and Applied Pharmacology*

Received date: 30 December 2017
Revised date: 1 September 2018
Accepted date: 4 September 2018

Please cite this article as: Gwan Ui Hong, Jin Whan Cho, Soo Youl Kim, Joo Ho Shin, Jai Youl Ro , Inflammatory mediators resulting from transglutaminase 2 expressed in mast cells contribute to the development of Parkinson's disease in a mouse model. Ytaap (2018), doi:10.1016/j.taap.2018.09.003

Inflammatory mediators resulting from transglutaminase 2 expressed in mast cells contribute to the development of Parkinson′s disease in a mouse model

Gwan Ui Hong[a], Jin Whan Cho[b], Soo Youl Kim[c], Joo Ho Shin[a], Jai Youl Ro[a,*]

[a]Department of Pharmacology, [b]Department of Neurology and SBRI, Sungkyunkwan University School of Medicine, Suwon, [c]Cancer Cell and Molecular Biology Branch, Division of Cancer Biology, Research Institute, National Cancer Center, Goyang, Korea

Short title: Parkinsonism caused by mast cell-expressed TG2

[*]Corresponding author: Dr. Jai Youl Ro, Department of Pharmacology and SBRI, Sungkyunkwan University School of Medicine, Suwon-440-746, Korea.
Tel: 82-31-299-6191, Fax: 82-31-299-6209, E-mail: jyro426@skku.edu

Abbreviations: BMMCs, Bone marrow-derived mast cells; DA neurons, Dopaminergic neurons; DAT, dopamine transporter; LTs, Leukotrienes; MAO_B, Monoamine oxidase B; MMP^+, 1-methyl-4-phenylpyridinium; MPTP, 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine; PD, Parkinson′s disease; SN, Substantia nigra; TG2, Transglutaminase 2; $TG2^{-/-}$, TG2 knockout (KO); TH, Tyrosine hydroxylase; WT, Wild type.