

This document certifies that the manuscript

**MDMA targets miR-124/MEKK3 via MALAT1 to promote Parkinson's disease
procession**

prepared by the authors

**Xin Geng^{1, 2#}, Shipeng Li^{1, 2#}, Jinghui Li^{1, 2}, Renli Qi^{1, 2}, Lianmei Zhong^{1,2*}, Hualin
Yu^{1, 2*}**

was edited for proper English language, grammar, punctuation, spelling, and overall style
by one or more of the highly qualified native English speaking editors at AJE.

This certificate was issued on **August 11, 2023** and may be verified
on the [AJE website](https://aje.com) using the verification code **FAA4-88A2-96F7-OE59-80AA**.



Neither the research content nor the authors' intentions were altered in any way during the editing process. Documents receiving this certification should be English-ready for publication; however, the author has the ability to accept or reject our suggestions and changes. To verify the final AJE edited version, please visit our verification page at aje.com/certificate. If you have any questions or concerns about this edited document, please contact AJE at support@aje.com.