



Open Research Online

Citation

Patel, Bhavik Anil; Fidalgo, Sara; Wang, Chunfang; Parmar, Leema; Mandona, Kasonde; Panossian, Annabelle; Flint, Melanie S.; Ranson, Richard N.; Saffrey, M. Jill and Yeoman, Mark S. (2017). The TNF- α antagonist etanercept reverses age-related decreases in colonic SERT expression and faecal output in mice. *Scientific reports*, 7, article no. 42754.

URL

<https://oro.open.ac.uk/48677/>

License

(CC-BY 4.0)Creative Commons: Attribution 4.0

Policy

This document has been downloaded from Open Research Online, The Open University's repository of research publications. This version is being made available in accordance with Open Research Online policies available from [Open Research Online \(ORO\) Policies](#)

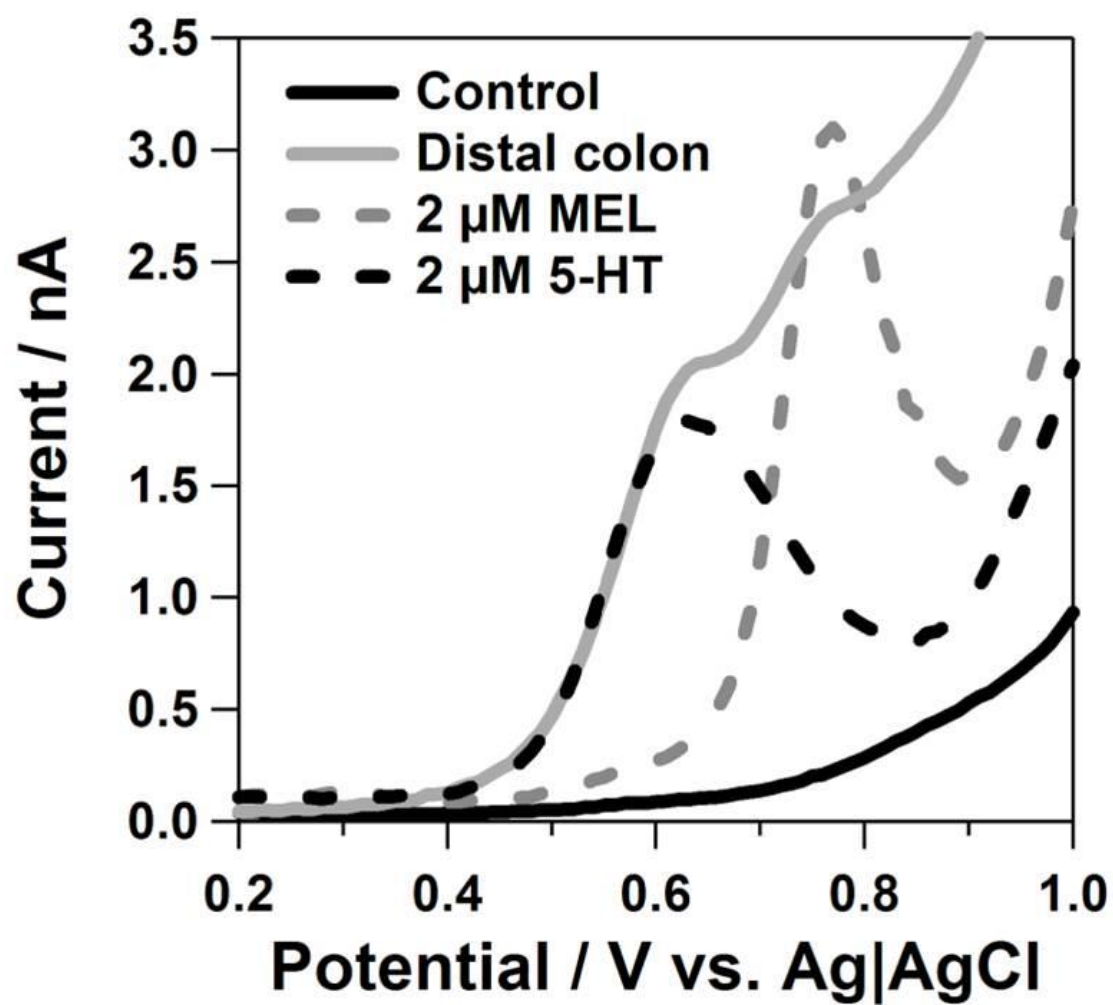
Versions

If this document is identified as the Author Accepted Manuscript it is the version after peer review but before type setting, copy editing or publisher branding

THE TNF- α ANTAGONIST ETANERCEPT REVERSES AGE-RELATED DECREASES IN COLONIC SERT EXPRESSION AND FAECAL OUTPUT IN MICE.

Bhavik Anil Patel¹, Sara Fidalgo¹, Chunfang Wang², Leena Parmar¹, Kasonde Mandona¹, Annabelle Panossian¹, Melanie S. Flint¹, Richard N. Ranson³, M. Jill Saffrey² and Mark S. Yeoman¹

Supplementary Figure 1: Typical voltammogram obtained using differential pulse voltammetry. With the electrode held 0.1 mm from the tissue two clear oxidation peaks can be seen at + 0.6V and + 0.75V (grey solid line), which correspond to the peaks for 5-HT (black dotted line) and melatonin (grey dotted line), respectively.



Supplementary Figure 2: Effects of Etanercept on myenteric 5-HT or the 5-HIAA:5-HT ratio in both 3 or 24 month old distal colon. In 24-month colon, etanercept had no effect on myenteric 5-HT levels (A) but reduced myenteric 5-HIAA:5-HT ratio (B). Etanercept failed to alter myenteric levels of 5-HT (C) or the 5-HIAA:5-HT ratio (D) in 3-month distal colon. * $p < 0.05$, $n=7$ for the 24 month groups and $n=8$ for the 3 month groups. Data are plotted as the mean \pm SD.

