

Jul 16, 2023

Gastrointestinal transit

DOI

<https://dx.doi.org/10.17504/protocols.io.4r3l22464l1y/v1>

Connor Monahan¹

¹Columbia University



Connor Monahan

Columbia University

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.4r3l22464l1y/v1>

Protocol Citation: Connor Monahan 2023. Gastrointestinal transit. protocols.io

<https://dx.doi.org/10.17504/protocols.io.4r3l22464l1y/v1>

License: This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: July 12, 2023

Last Modified: May 31, 2024

Protocol Integer ID: 84891

Keywords: Gastrointestinal transit, constipation, carmine red, motility, ASAPCRN, measuring gastrointestinal transit time, gastrointestinal transit, gastrointestinal transit this protocol detail, mice, protocol

Funders Acknowledgements:

Aligning Science Across Parkinson's

Grant ID: 0375

Abstract

This protocol details measuring gastrointestinal transit time in mice

Attachments



[786-1996.pdf](#)

39KB

Materials

Reagents

 Carmine Merck MilliporeSigma (Sigma-Aldrich) Catalog #C1022

 0.5% methylcellulose Merck MilliporeSigma (Sigma-Aldrich) Catalog #M0512



Procedure

1h 10m

- 1 Prepare a sterile solution of carmine red (300 μ l; 6%; Sigma-Aldrich, Cat #C1022; St Louis, MO) suspended in 0.5% methylcellulose (Sigma-Aldrich, Cat #M0512; St Louis, MO).
- 2 Administer  0.3 mL of carmine red solution by gavage through a 21-gauge round-tip feeding needle.
 - 2.1 The time at which gavage takes place is recorded as T_0 .
- 3 Place each mouse in separate cages without bedding.
- 4  01:00:00 after gavage, monitor fecal pellets at  00:10:00 intervals for the presence of carmine red. Total GI transit time is considered as the interval between T_0 and the time of first observance of carmine red in the stool.

1h 10m