

**Name of Journal:** *World Journal of Gastroenterology*

**Manuscript NO:** 53392

**Manuscript Type:** ORIGINAL ARTICLE

### *Basic Study*

**PTEN induced kinase 1-induced dynamin-related protein 1 Ser637 phosphorylation reduces mitochondrial fission and protects against intestinal intestinal ischemia reperfusion injury**

Qasim W *et al.* PINK1/DRP1 pathway in intestinal I/R injury

Wasim Qasim, Yang Li, Rui-Min Sun, Dong-Cheng Feng, Zhan-Yu Wang, De-Shun Liu, Ji-Hong Yao, Xiao-Feng Tian

### **Abstract**

#### **BACKGROUND**

Intestinal ischemia reperfusion (I/R) occurs in various diseases, such as trauma and intestinal transplantation. Excessive reactive oxygen species (ROS) accumulation and subsequent apoptotic cell death in intestinal epithelia are critical causes of I/R injury. PTEN-induced putative kinase 1 (PINK1) and

### Match Overview

Rank	Source	Words	Similarity
1	Crossref	131 words Chen, Shang-Der, Tsu-Kung Lin, Ding-I. Yang, Su-Ying Le e, Fu-Zen Shaw, Chia-Wei Liou, and Yao-Chung Chuang. "	3%
2	Crossref	22 words Wang, Guangzhi, Jihong Yao, Zhenlu Li, Guo Zu, Dongche ng Feng, Wen Shan, Yang Li, Yan Hu, Yongfu Zhao, and Xi	1%
3	Crossref	16 words Maria E Solesio. "3-Nitropropionioc acid induces autophagy by mitochondrial permeability transition pore formation	<1%
4	Internet	15 words crawled on 16-Jun-2017 f1000.com	<1%
5	Crossref	14 words Xie, N., C. Wang, Y. Lian, C. Wu, H. Zhang, and Q. Zhan( ... "Inhibition of mitochondrial fission attenuates Aβ-induced	<1%
6	Crossref	13 words Xiao-Peng Yuan, Long-Shan Liu, Chuan-Bao Chen, Jian Z hou, Yi-Tao Zheng, Xiao-Ping Wang, Ming Han, Chang-Xi	<1%
7	Crossref	13 words Cui, Zhen-Tian, Jian-Ping Liu, and Wan-Lin Wei. "The effe cts of tanshinone IIA on hypoxia/reoxygenation-induced m	<1%
8	Internet	12 words crawled on 09-Aug-2019 tessera.spandidos-publications.com	<1%
9	Internet	12 words crawled on 15-Mar-2020 bpspubs.onlinelibrary.wiley.com	<1%
10	Crossref	12 words Zhang, Feng, Yan Hu, Xiaomei Xu, Xiaohan Zhai, Guangzhi Wang, Shili Ning, Jihong Yao, and Xiaofeng Tian. "Icariin ...	<1%

PTEN induced kinase 1-induced dynamin-related prot



ALL

IMAGES

VIDEOS

12,200 Results

Any time ▾

## Dynamin-Related Protein 1 (DRP1)-Mediated Mitochondrial ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3539779>

May 25, 2012 · Conversely, **Fission-1** (FIS1) and **Dynamin-related protein-1** (DRP1) mediate **mitochondrial fission**. 16. DRP1's activity results from **phosphorylation** by regulatory kinases, including the mitosis regulator, cyclin B1/Cyclin-dependent **kinase 1** (CDK1), which causes mitotic **phosphorylation** of Serine 616 and activation of DRP1.

**Cited by:** 303

**Author:** Glenn Marsboom, Peter T. Toth, John ...

**Publish Year:** 2012

## Dynamin-Related Protein 1-Mediated Mitochondrial Mitotic ...

<https://www.ahajournals.org/doi/10.1161/CIRCRESAHA.111.263848>

Conversely, **fission-1** and **dynamin-related protein-1** (DRP1) mediate **mitochondrial fission**. 16 The activity of DRP1 results from **phosphorylation** by regulatory kinases, including the mitosis regulator, cyclin B1/cyclin-dependent **kinase 1** (CDK1), which causes mitotic **phosphorylation** of serine 616 and activation of DRP1. On activation, DRP1 moves ...

**Cited by:** 303

**Author:** Glenn Marsboom, Peter T. Toth, John ...

**Publish Year:** 2012

## Mitochondrial dysfunction in inflammatory bowel disease

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4589667>

Oct 01, 2015 · Both ER-mitochondria interactions (Friedman et al., 2011) and the cytosolic **protein dynamin-related protein 1** (Drp1) (Chen ... (**PTEN**)-**induced kinase 1** (Pink1) and the cytosolic E3 ubiquitin ligase ... Hepatocyte nuclear factor 4alpha in the **intestinal** epithelial cells **protects against** inflammatory bowel disease. *Inflamm. Bowel Dis.* 14, 908 ...

**Cited by:** 86

**Author:** Elizabeth A. Novak, Kevin P. Mollen

**Publish Year:** 2015



PTEN induced kinase 1-induced dynamin-related proteir



ALL IMAGES VIDEOS

12,200 Results Any time

### Dynamin-Related Protein 1 (DRP1)-Mediated Mitochondrial ...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3539779>

May 25, 2012 · Conversely, **Fission-1 (FIS1)** and **Dynamin-related protein-1 (DRP1)** mediate **mitochondrial fission** 16. DRP1's activity results from **phosphorylation** by regulatory kinases, including the mitosis regulator, cyclin B1/Cyclin-dependent **kinase 1 (CDK1)**, which causes mitotic **phosphorylation** of Serine 616 and activation of DRP1.

**Cited by:** 303      **Author:** Glenn Marsboom, Peter T. Toth, John J. ...  
**Publish Year:** 2012

### Dynamin-Related Protein 1–Mediated Mitochondrial Mitotic ...

<https://www.ahajournals.org/doi/10.1161/CIRCRESAHA.111.263848>

Conversely, **fission-1** and **dynamin-related protein-1 (DRP1)** mediate **mitochondrial fission**. 16 The activity of DRP1 results from **phosphorylation** by regulatory kinases, including the mitosis regulator, cyclin B1/cyclin-dependent **kinase 1 (CDK1)**, which causes mitotic **phosphorylation** of serine 616 and activation of DRP1. On activation, DRP1 moves ...

**Cited by:** 303      **Author:** Glenn Marsboom, Peter T. Toth, John J. ...  
**Publish Year:** 2012

### Mitochondrial dysfunction in inflammatory bowel disease