

## ESPS PEER-REVIEW REPORT

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

**ESPS manuscript NO:** 28939

**Title:** Vitamin D differentially regulates Salmonella-induced intestine epithelial autophagy and interleukin-1  $\beta$  expressions

**Reviewer's code:** 03254033

**Reviewer's country:** United Kingdom

**Science editor:** Jing Yu

**Date sent for review:** 2016-07-25 10:50

**Date reviewed:** 2016-07-29 22:06

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good		<input type="checkbox"/> Duplicate publication	
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade E: Poor		<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Minor revision
	<input type="checkbox"/> Grade D: Rejected	BPG Search:	<input type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

## COMMENTS TO AUTHORS

An elegant in vitro study demonstrating the impact of vitamin D3 upon Salmonella induced autophagy. The effect of vitamin D on autophagy in the intestine has been recently widely documented, so this is a timely study using an in vitro intestinal cell model. The figures demonstrate that vitamin D3 enhances Salmonella-induced upregulation of Vitamin D receptor (VDR) expression. Thus consequently, as autophagy is mediated through VDR, enhancement of expression potentially improves pathogen clearance and/or immunoregulation in inflammatory bowel disease, known to be associated with defects in autophagy. Implications of findings with regard to published data, is discussed thoroughly. Minor points More detail on the specific methods should be included, e.g. cell culture conditions such as % serum used, length of time in culture, passage number and confluency of Caco2 cells. Such parameters are known to impact on cell responses. General comments such as 'Standard laboratory reagents were from Sigma (St. Louis, MO, USA) or Fisher Scientific (Pittsburgh, PA, USA)'. Are too vague and should be removed.