

**ESPS Peer-review Report****Name of Journal:** World Journal of Gastroenterology**ESPS Manuscript NO:** 9047**Title:** Claudin 1 plays important roles in cell migration and TNF $\alpha$  signaling in human gastric cancer cells**Reviewer code:** 00004011**Science editor:** Ya-Juan Ma**Date sent for review:** 2014-01-19 13:17**Date reviewed:** 2014-02-22 19:07

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

**COMMENTS TO AUTHORS**

It is a well documented and very interesting manuscript

**ESPS Peer-review Report**
**Name of Journal:** World Journal of Gastroenterology

**ESPS Manuscript NO:** 9047

**Title:** Claudin 1 plays important roles in cell migration and TNF $\alpha$  signaling in human gastric cancer cells

**Reviewer code:** 01197938

**Science editor:** Ya-Juan Ma

**Date sent for review:** 2014-01-19 13:17

**Date reviewed:** 2014-02-24 09:03

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input checked="" type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input checked="" type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

**COMMENTS TO AUTHORS**

Authors described the role of claudin1, one of the gap junction components, in gene regulation and cellular kinetics in gastric carcinomas. They identified a tumor progression role of claudin 1 in MKN28 cell line, while similar phenomena have been reported in other malignant cell lines. This reviewer suggests the number of issues, as noted bellow; TNF- $\alpha$  signals are reportedly dominated by NF- $\kappa$ B transcriptional systems. Does silencing of claudin1 alter NF- $\kappa$ B signals? Subcellular distribution of claudin1 during expression changes is needed to be investigated. How claudin1 modulate gene expression? This should be mentioned. Claudin1 forms gap junctions in normal epithelium and loss of claudin1 facilitates epithelial transformation. Conversely, over-expression of claudin1 in cancer cell lines augments their malignancy in some instances. It seems contradictory. Why such difference occurs?

# ESPS Peer-review Report

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

**ESPS Manuscript NO:** 9047

**Title:** Claudin 1 plays important roles in cell migration and TNF $\alpha$  signaling in human gastric cancer cells

**Reviewer code:** 00503458

**Science editor:** Ya-Juan Ma

**Date sent for review:** 2014-01-19 13:17

**Date reviewed:** 2014-02-25 20:03

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input checked="" type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

## COMMENTS TO AUTHORS

In this paper the authors investigated the role of Claudin 1 in the regulation of genes involved cell migration and TNF- $\alpha$ -induced gene expression in human gastric adenocarcinoma MKN28 cell line. The knockdown of Claudin 1 significantly inhibited cell proliferation, migration infiltration and increased apoptosis. Microarray analysis revealed that Claudin-1 knockdown modulate the expression of 245 genes. Pathway analysis showed that the top-ranked molecular and cellular function was the cell migration related pathway and that TNF- $\alpha$  and NF $\kappa$ B were the top-ranked upstream regulators related to Claudin-1. The involvement of Claudin 1 in tumorigenesis and in tumor progression has been widely documented particularly in gastric cancer where it has also been reported that up-regulation of Claudin 1 is related to transformation in invasive and metastatic cancer. The same authors have recently showed that the expression of Claudin 1 was increased in upon TNF- $\alpha$  treatment of A549 lung carcinoma cell line. Due to the previous studies already published this manuscript lacks of originality however, the study is well conceived and the experimental plan has been rigorously conducted. The only concern raised by this reviewer is the use of only one cell lines throughout the study. The validation of the results in at least another gastric adenocarcinoma cell lines could reinforce the conclusions.

**ESPS Peer-review Report**

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

**ESPS Manuscript NO:** 9047

**Title:** Claudin 1 plays important roles in cell migration and TNF $\alpha$  signaling in human gastric cancer cells

**Reviewer code:** 01939901

**Science editor:** Ya-Juan Ma

**Date sent for review:** 2014-01-19 13:17

**Date reviewed:** 2014-02-28 00:57

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input checked="" type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input checked="" type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input checked="" type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

**COMMENTS TO AUTHORS**

I hope the paper will be published to guide more researchers.

**ESPS Peer-review Report**
**Name of Journal:** World Journal of Gastroenterology

**ESPS Manuscript NO:** 9047

**Title:** Claudin 1 plays important roles in cell migration and TNF $\alpha$  signaling in human gastric cancer cells

**Reviewer code:** 00077679

**Science editor:** Ya-Juan Ma

**Date sent for review:** 2014-01-19 13:17

**Date reviewed:** 2014-03-04 14:48

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input checked="" type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
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**COMMENTS TO AUTHORS**

This article by Shiozaki A et al. reported "Claudin 1 plays important roles in cell migration and TNF signaling in human gastric cancer cells". They reported that claudin 1 knock down significantly inhibited cell migration and invasion in gastric cancer cells. And the down-regulation of claudin 1 changed the expression level of TNF-alpha signal. This article shows sufficient quality to publish in WJG, but before publishing the authors need to add some data. General comments: The biggest issue is that the author used only one cell line, MKN28, and reported. If we report the results of experiment with a type of cancer, at least 5 cell lines are necessary. Please add 4 more gastric cell line for this experiment. Minor point: 1) Why the author used Claudin 1? claudin 1 is better.