

## Ethics Committee Approval Sheet

<b>NO. ( Filled by committee )</b>		20170005	<b>Research unit</b>	the Wujin Hospital Affiliated to Jiangsu University, Changzhou	
<b>Title of work</b>	NEK2 promotes gastric carcinoma cells proliferation via ERK/MAPK signaling			<b>Research period</b>	2017.01-2019.01
<b>Researchers</b>	Weidong Fan, Tao Chen, Pengjun Liu			<b>Corresponding author</b>	Pengjun Liu

### Abstract

NEK2, most closely related to mitosis, is often overexpressed in many poorly prognostic cancers, but the effect of the up-regulated NEK2 on the cellular signaling conduction in tumor is confusing. In this study, we found that NEK2 was significantly up-regulated in 30 pairs of human GC tissues. In addition, ERK is significantly associated with NEK2 expression in human clinical specimens, and combined NEK2 with ERK overexpression potentially forecasts poor prognosis and survival in GC patients. NEK2 knockdown in gastric cancer cells inhibits ERK and c-JUN phosphorylation and reduces transcription of Cyclin D1. More interestingly, NEK2 can rescue the inhibition of cellular viability, proliferation, and cell cycle progression due to ERK knockdown. Therefore, our results indicate that NEK2 plays a carcinogenic role in the malignant proliferation of GC cells via the ERK/MAPK signaling, which is important for treatment and improving patient survival.

### The applicants (researchers) promised :

1. This study USES the primitiveness analysis method;
2. The study by our hospital ethical committee for examination and approval, the feeling of all client signed consent form;
3. Anonymously to the statistics, this study will never patient information to a third party, favorable results to guide diagnosis and treatment, patients do not take on additional risk.

### Ethics committee:

This research is discussed by Department of o Gastroenterology, the Wujin Hospital Affiliated to Jiangsu University, Jiangsu Province ethics committee, agree approval to conduct the research.



Ethics committee (chapter):

Date: 20170115