Reviewer's report

Title: Inducing Apoptosis Effects and Its Molecular Mechanisms of BAK Gene Over-expression on Gastric cancer Cells

Version: 1 Date: 23 March 2004

Reviewer: Angeles Garcia-Pardo

Reviewer's report:

General

This manuscript reports on the effect of Bak over-expression on the behaviour of a gastric cancer cell line. The results show that Bak inhibits cell growth and induces cell cycle arrest and partial apoptosis. Because the role of Bak in apoptosis is still not completely understood, these results constitute an interesting short contribution to the possible role of this molecule in gastric cancer. However, some aspects of the manuscript must be revised before it can be accepted for publication.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. One major concern is that the entire work was done with one cell line. Perhaps the authors have some experimental information on other gastric cancer cell lines, which would be pertinent to include here. Also the authors should speculate more on the possible role of Bak in cancer and its possible future applications as therapy.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

2. The beginning of the Results section (1. Identification of eukaryotic…) contains experimental details that belong to the Materials and Methods, and not to Results. This should be corrected.

3. Figures 1, 2 and 3, which are controls of the system used, should be combined into one figure with three parts A, B and C.

4. Figures 4 and 5 really represent two different methods of measuring the same thing (cellular growth), and one of them should be removed (perhaps Fig. 4). Fig. 5 should then be combined with Figure 6, which analyzes the cell cycle, also an indication of cell division.

4. pg. 8, first line: the time after which the apoptosis rate is 4.7% should be indicated.

5. The Introduction section is very short and the beginning of the Discussion reads more as an introduction to the paper. This should be re-written and some information stated in the Introduction.

6. There are no Figure legends on this manuscript. This section must be included since it is crucial for understanding the figures.

7. The manuscript contains several important language mistakes and should be corrected by someone familiar with English writing before publication.
Discretionary Revisions (which the author can choose to ignore)

**What next?:** Accept after minor essential revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No

**Declaration of competing interests:**

None