

1 Institutional Review Board (IRB) statement approval.

The study was reviewed and approved by the Weifang Medical University Institutional Review Board.

Meihua Qu 04/29/2015

2 Institutional Animal Care and Use Committee (IACUC) statement.

All procedures involving animals were reviewed and approved by the Institutional Animal Care and Use Committee of the Weifang Medical University.

Meihua Qu 04/29/2015

3 Animal care and use statement.

The animal protocol was designed to minimize pain or discomfort to the animals. The animals were acclimatized to laboratory conditions (23°C, 12h/12h light/dark, 50% humidity, *ad libitum* access to food and water) for two weeks prior to experimentation. Intragastric gavage administration was carried out with conscious animals, using straight gavage needles appropriate for the animal size (15-17 g body weight: 22 gauge, 1 inch length, 1.25 mm ball diameter). All animals were euthanized by barbiturate overdose (intravenous injection, 150 mg/kg pentobarbital sodium) for tissue collection.

Meihua Qu 04/29/2015

4 Biostatistics statement.

The statistical methods of this study were reviewed by Xiangyun Li from the Department of statistical, Weifang Medical University.

Meihua Qu 04/29/2015