

Hydrogen sulfide ameliorates chronic renal failure in rats by inhibiting apoptosis and inflammation through ROS/MAPK and NF- κ B signaling pathways

**Dongdong Wu ^{a,1}, Ning Luo ^{b,1}, Lianqu Wang ^b, Zhijun Zhao ^c, Hongmin Bu ^b,
Guoliang Xu ^b, Yongjun Yan ^b, Xinpeng Che ^b, Zhiling Jiao ^b, Tengfu Zhao ^b,
Jingtao Chen ^b, Ailing Ji ^a, Yanzhang Li ^{a,*}, Garrick D. Lee ^{b,*}**

^a *Henan University School of Medicine, Kaifeng 475004, Henan, China*

^b *The First Affiliated Hospital of Henan University, Kaifeng 475001, Henan, China*

^c *Luohe Medical College, Luohe 462002, Henan, China*

¹Dongdong Wu and Ning Luo contributed equally to this work and should be regarded as co-first authors.

* Corresponding authors: The First Affiliated Hospital of Henan University, Kaifeng 475001, Henan, China. Tel: +86 371 22735069; Fax: +86 371 25661846 (G. Lee).
Henan University School of Medicine, Kaifeng 475004, Henan, China. Tel: +86 371 23880585; Fax: +86 371 23880585 (Y. Li).

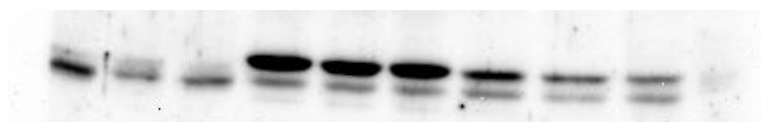
E-mail addresses: Garricklee@foxmail.com (G. Lee), yanzhang206@163.com (Y. Li).



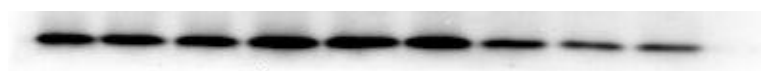
Bax



Bcl-2



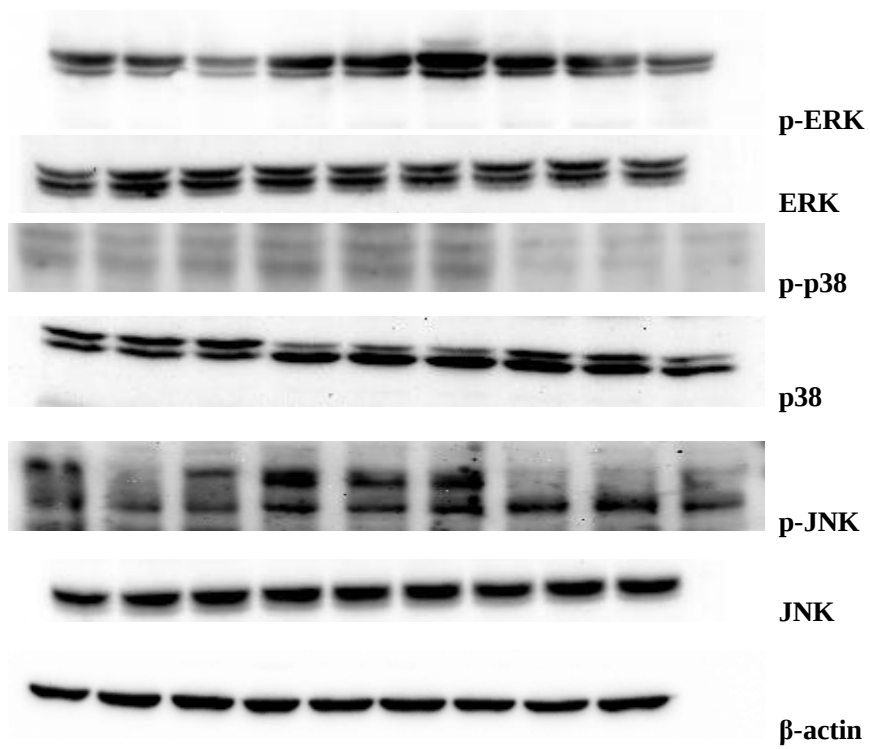
Caspase-3



Cleaved Caspase-3

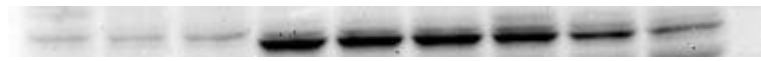


β -actin





p50



p65



p-p65



β -actin