The effect of Ganoderma lucidum extract on immunological function and identify its anti-tumor immunostimulatory activity based on the biological network

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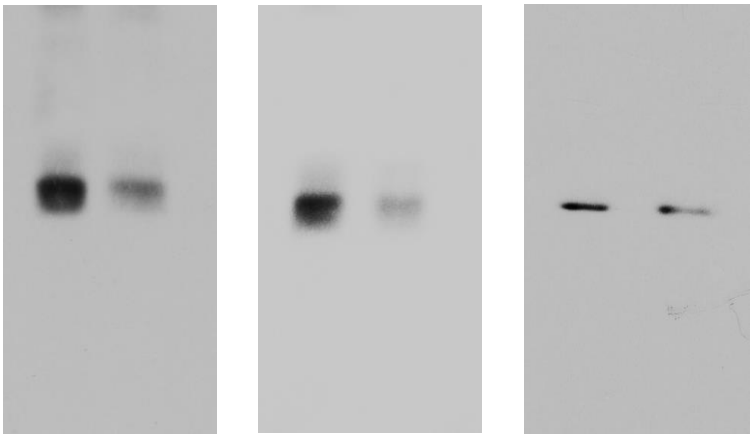
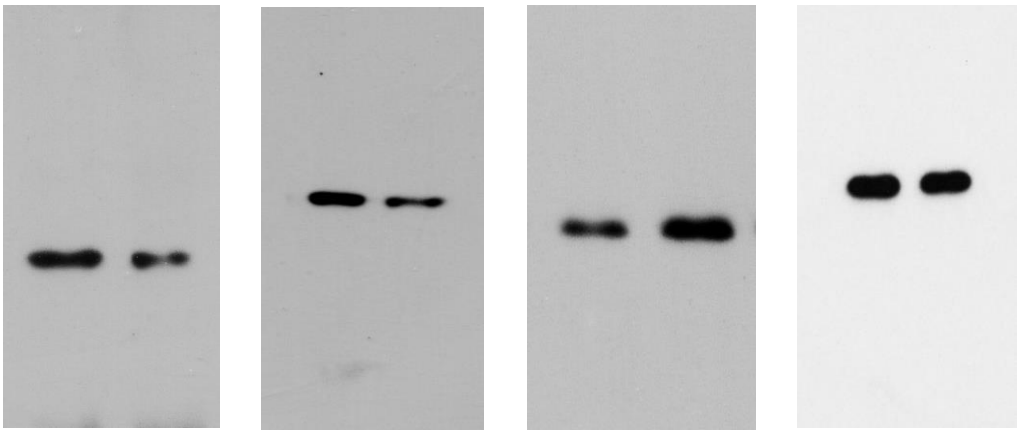
Supplementary data 1: The 6 kernel mRNAs related encoding proteins were validated using Western-blot, which including GNAS, PTPN22, CD3G, PRKG2, MAP3K8 and NGFR. The β-actin was used as a loading control.



GNAS PTPN22 CD3G

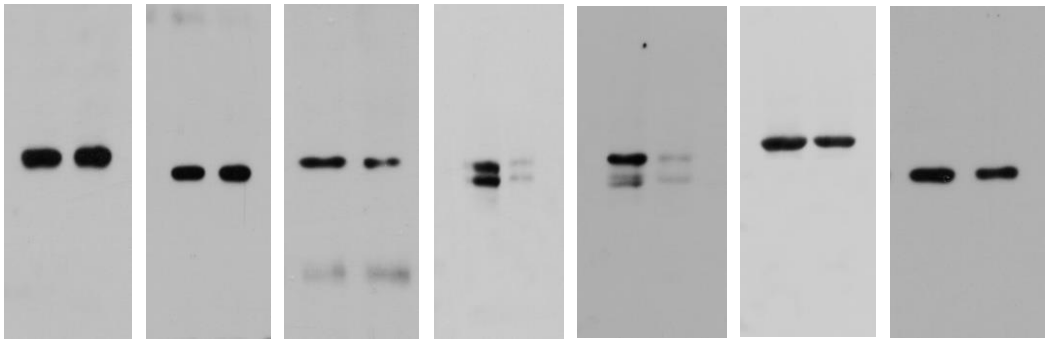


PRKG2 MAP3K8 NGFR actin

Supplementary data 2:

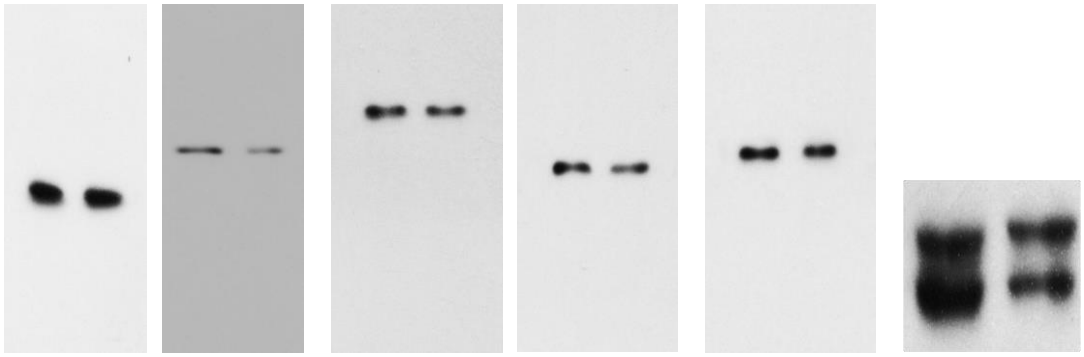
(A) The Jak/Stat signaling pathway related proteins were validated using Western-blot, and the expression levels of JAK3, p-Stat1, p-Stat3, p-Stat5 and p-Stat6 were significantly inhibited by GLE in vivo; (B) The T cell receptor signaling pathway related proteins were validated using Western-blot, and the expression levels of p-Lck and p-Zap-70 were down-regulated; (C) The PI3K/Akt/mTOR signaling pathway related proteins were validated using Western-blot, the expression levels of p-Akt and p-mTOR were down-regulated, and PI3K was up-regulated. The β-actin was used as a loading control.

(A)



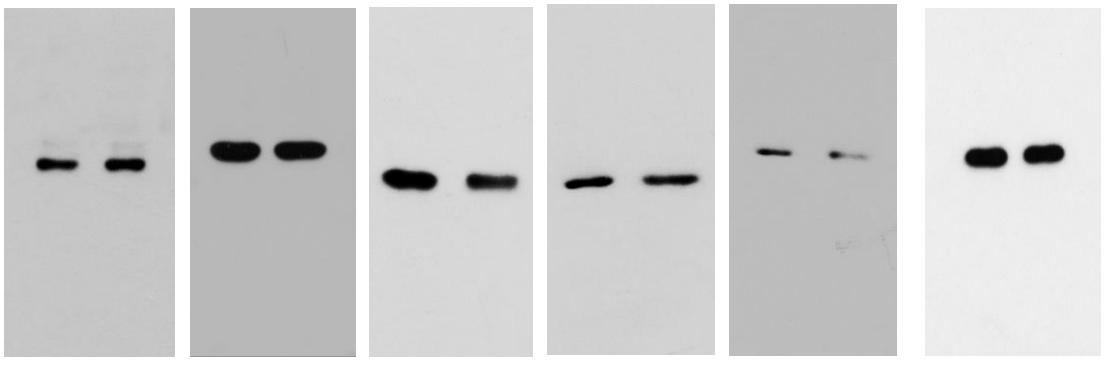
Jak1 Jak2 Jak3 p-Stat1 p-Stat3 p-Stat5 p-Stat6

(B)



CD3-12 p-Lck p-PLCy1 p-SLP-76 p-Src p-Zap-70

(C)



PI3K Akt p-Akt mTOR P-mTOR actin