

Anti-pseudo-allergic capacity of alkaloids screened from *Uncaria Rhynchophylla*

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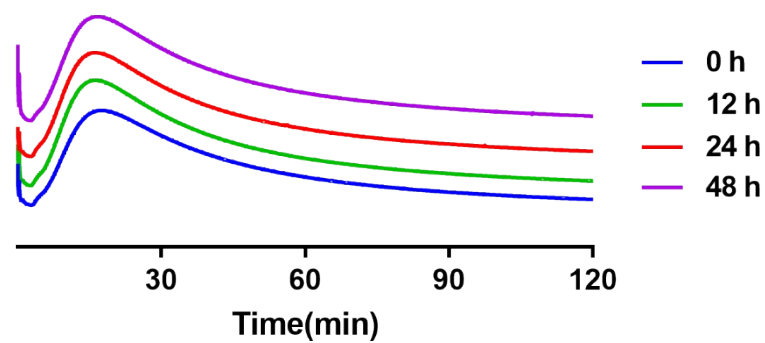


Fig. S1. Repeatability of ciprofloxacin on MRGPRX2/CMC column.

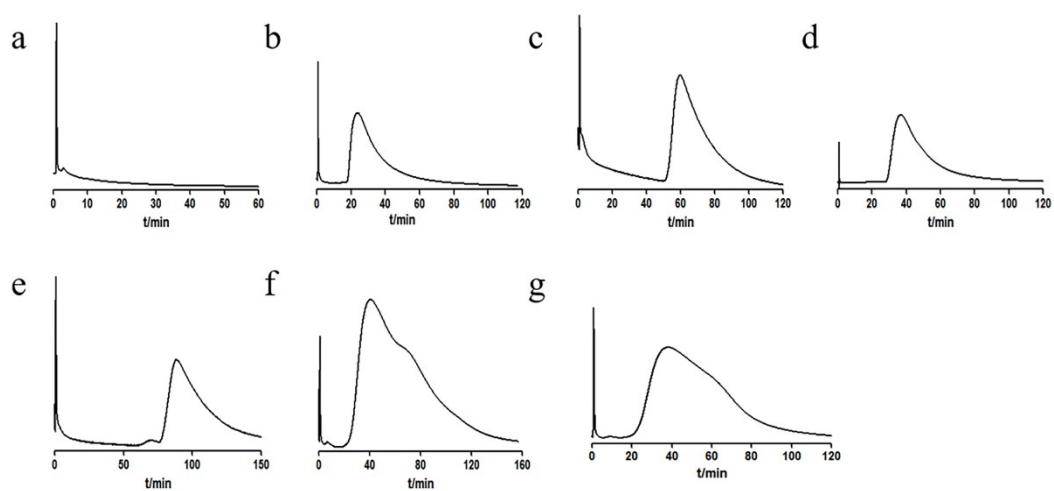
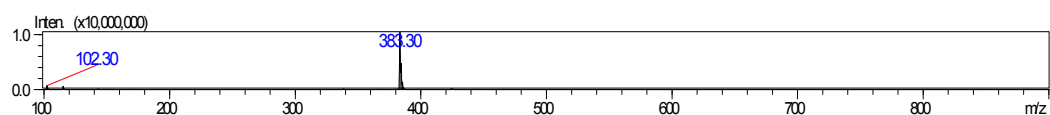
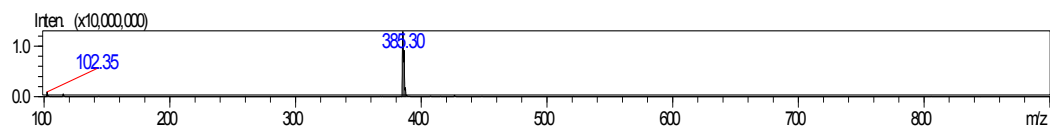


Fig. S2. Chromatogram of G1-G7 on MRGPRX2/CMC column.

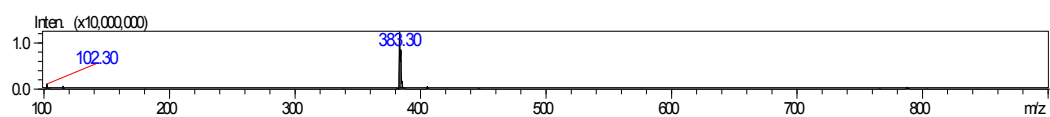
G2



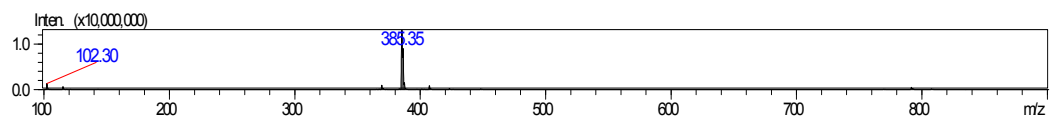
G3



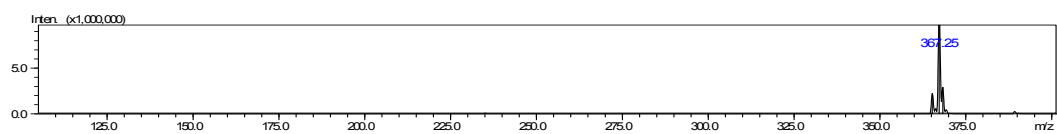
G4



G5



G6



G7

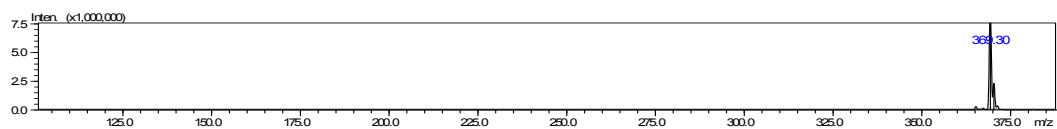


Fig. S3. Mass spectra of G2-G7

Table.S1 HPLC-MS/MS information of compounds in UR

Peak No.	t _R (min)	Formula	Selected ion	Expected	Detected
2	11.12	C ₂₂ H ₂₆ N ₂ O ₄	[M+H] ⁺	383.45	383.30
3	12.88	C ₂₂ H ₂₈ N ₂ O ₄	[M+H] ⁺	385.46	385.30
4	14.44	C ₂₂ H ₂₆ N ₂ O ₄	[M+H] ⁺	383.45	383.30
5	18.86	C ₂₂ H ₂₈ N ₂ O ₄	[M+H] ⁺	385.46	385.35
6	20.76	C ₂₂ H ₂₆ N ₂ O ₃	[M+H] ⁺	367.46	367.25
7	26.73	C ₂₂ H ₂₈ N ₂ O ₃	[M+H] ⁺	369.46	369.30

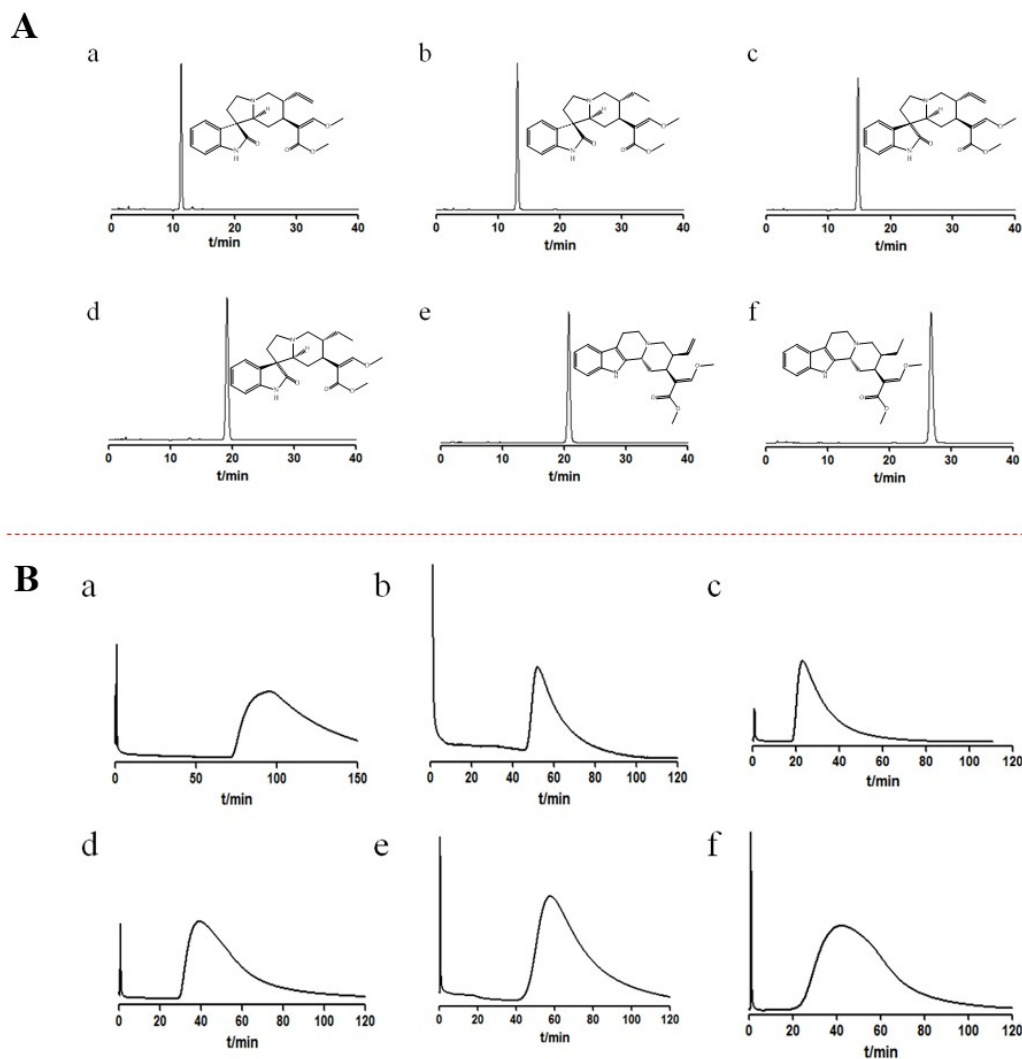


Fig. S4.A The retained time and structures of G2-G7. B. Chromatogram of Rhy, Isorhy, Cor, Isacor, Hir, and Hie on MRGPRX2/CMC column.

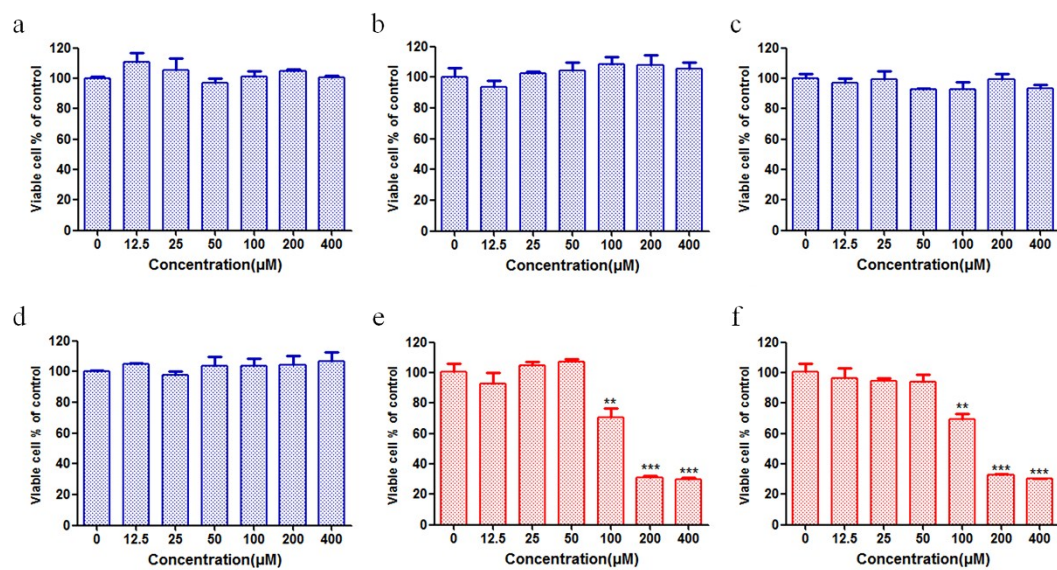


Fig. S5. Effect of Rhy(a), Isorhy(b), Cor(c), Isocor(d), Hirsutine(e), and Hirsuteine(f) on cell viability on LAD2 cells measured by CCK-8 assay. Data are presented as the means $\pm$ S.E.M (n=5); *P<0.05, **P<0.01 and ***P<0.001 vs. control cells.

Fig. 7. Rhy(a), Isorhy(b), Cor(c) and Isocor(d) degranulation effect on LAD2 mast cells. A. The β -Hexosaminidase release rate was analyzed after treatment of four alkaloid. B. The release level of histamine was determined after treatment of four alkaloid. Data are presented as the means $\pm$ S.E.M (n=3); *P<0.05, **P<0.01 and ***P<0.001 vs. C48/80 group.

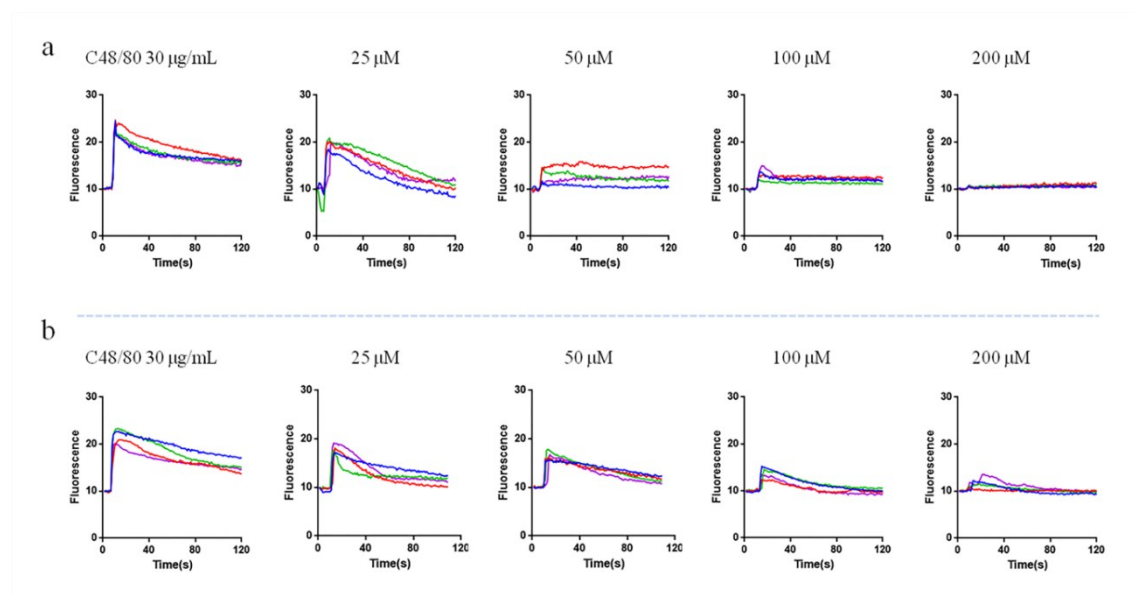


Figure S6. The Ca^{2+} influx of isorhy (a) and cor (b) in MRGPRX2 cells.