



**Movie S1. fMLF-induced mouse neutrophil chemotaxis treated by DMSO.**



**Movie S2. Inhibitory effects of PF1052 on mouse neutrophil chemotaxis at 10  $\mu$ M.**



**Movie S3. Inhibitory effects of Sterigmatocystin on mouse neutrophil chemotaxis at 100  $\mu$ M.**



**Movie S4. At higher concentration (20  $\mu\text{M}$ ), most of PF1052 treated neutrophils remained stationary with a few outliers.**



**Movie S5. Nearly all neutrophils treated by Sterigmatocystin at 200  $\mu\text{M}$  failed to migrate out.**

Supplementary Table S1. Natural product library ID and candidate hits.

Plate ID	Candidate after one round of screening	Confirmed
XF06-1	A10, E07	
XF06-2	A08,A10,H08	A10
XF06-3	D08	
XF06-4	D10	
XF06-5	B03,B05 ,C05	B03
XF06-6	B05,B09	
XF06-7	G04	
XF06-8		
XF06-9		
XP06-1	A10,D01,D02,D03 ,D04 ,D05	
XP06-2	E04,E08,F04 ,F05,F06	
XM01-1	B2,B3,D5,F2,H2,H3,H4,H5	
MB01	B1,B10,C6	

**Table S1. Natural product library ID and candidate hits.**