

*Supplementary Materials*

# Bioguided Fractionation of Local Plants against Matrix Metalloproteinase9 and Its Cytotoxicity against Breast Cancer Cell Models: *In Silico* and *In Vitro* Study

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**Table S1:** The binding affinity of published PEX9 inhibitors predicted by molecular docking compared to their experimental dissociation constant upon PEX9 inhibition.

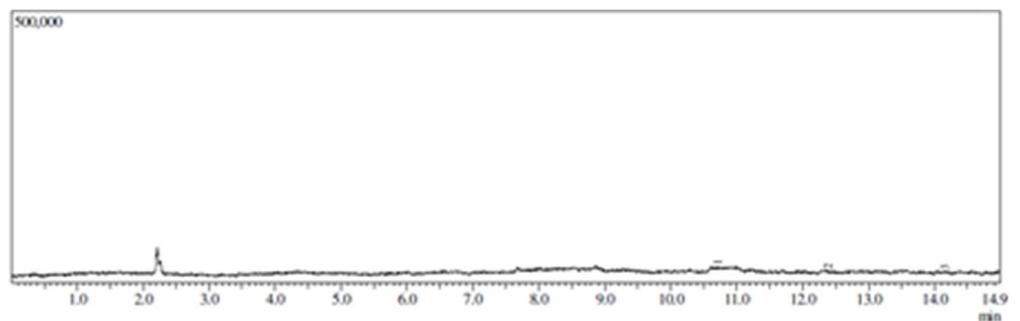
Ligand	Free Energy of Binding (kcal/mol)	K <sub>d</sub> <sup>18, 19</sup> (μM)	Activity Classification
alford_3d	-8.70	0.49	TP
alford_4d	-8.60	0.31	TP
dufour_2	-7.90	2.00	FP
alford_4c	-7.70	0.65	TP
alford_3a	-7.60	0.56	TP
alford_1d	-7.60	1.33	uncertain
alford_3b	-7.50	0.49	TP
alford_4a	-7.40	0.42	TP
alford_1c	-7.00	4.22	FP
alford_1a	-7.00	1.33	uncertain
alford_2c	-6.80	0.87	TP
alford_2a	-6.70	1.15	uncertain
alford_3c	-6.70	0.32	TP
alford_4b	-6.60	0.87	TP
alford_1b	-6.50	4.87	FP
alford_1f	-5.90	0.49	TP
alford_4e	-5.70	0.87	TP

Uncertain = moderately active

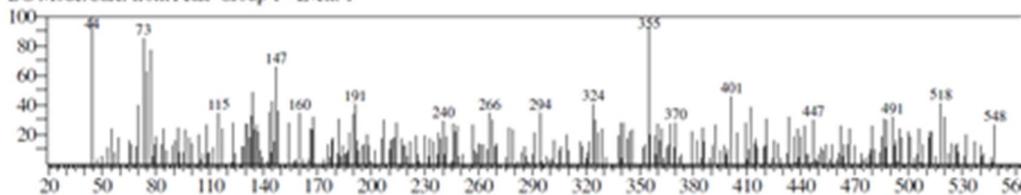
**Table S2: The yield of Ageratum conyzoides and Ixora coccinea fractions of ethylacetate and *n*-hexane, respectively.**

Plants	Yield (%)			
	Fraction 1	Fraction 2	Fraction 3	Fraction 4
<i>Ageratum conyzoides</i>	8.8	15.8	7.0	7.0
<i>Ixora coccinea</i>	6.8	0.3	0.9	NA

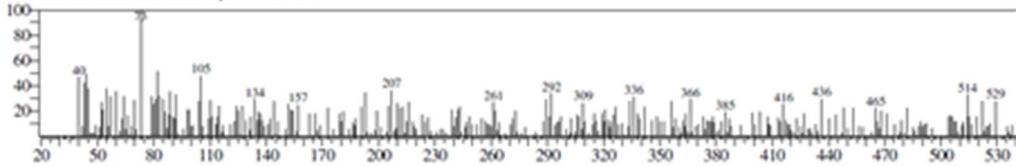
**Figure S1.** The mass spectra of three peaks identified from GC chromatogram of Ixora fraction 1. The three GC chromatogram peaks with Rt 10.709 min, 12.380 min, and 14.153 min are detected as compounds having mass/ ion: 548 (base peak 355), 529 (base peak 73), and 528 (base peak 73), respectively. The base peak informs the most stable fragment during electron impact in MS characterization.



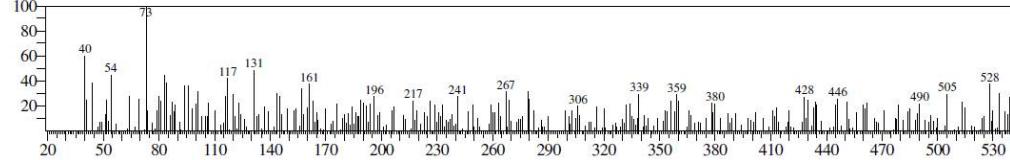
Line#1 R.Time:10.710(Scan#:2143) MassPeaks:288  
RawMode:Averaged 10.705-10.715(2142-2144) BasePeak:44.00(114)  
BG Mode:Calc. from Peak Group 1 - Event 1



Line#2 R.Time:12.380(Scan#:2477) MassPeaks:305  
RawMode:Averaged 12.375-12.385(2476-2478) BasePeak:73.05(180)  
BG Mode:Calc. from Peak Group 1 - Event 1



Line#3 R.Time:14.155(Scan#:2832) MassPeaks:298  
RawMode:Averaged 14.150-14.160(2831-2833) BasePeak:73.05(153)  
BG Mode:Calc. from Peak Group 1 - Event 1





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