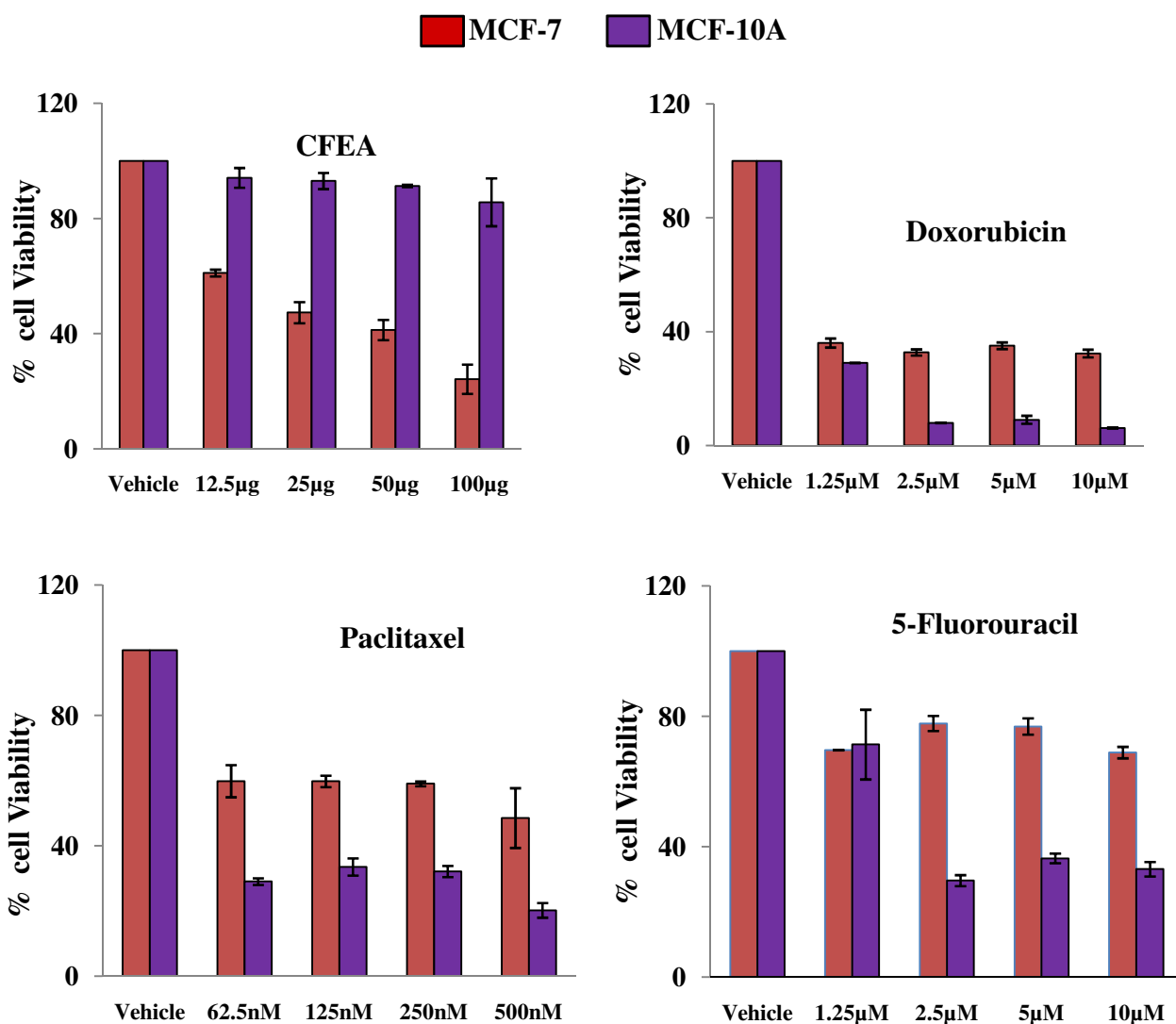


**Anti-breast tumor activity of Eclipta extract *in-vitro* and *in-vivo*: novel evidence of endoplasmic reticulum specific localization of Hsp60 during apoptosis**

Rakesh K Arya, Akhilesh Singh, Navneet K Yadav, Srikanth H Cheruvu, Zakir Hossain, Sanjeev Meena, Shrankhla Maheshwari, Anup K Singh, Uzma Shahab, Chetan Sharma, Kavita Singh, Tadigoppula Narender, Kalyan Mitra, Kamal R Arya, Rama K Singh, Jiaur R Gayen, Dipak Datta



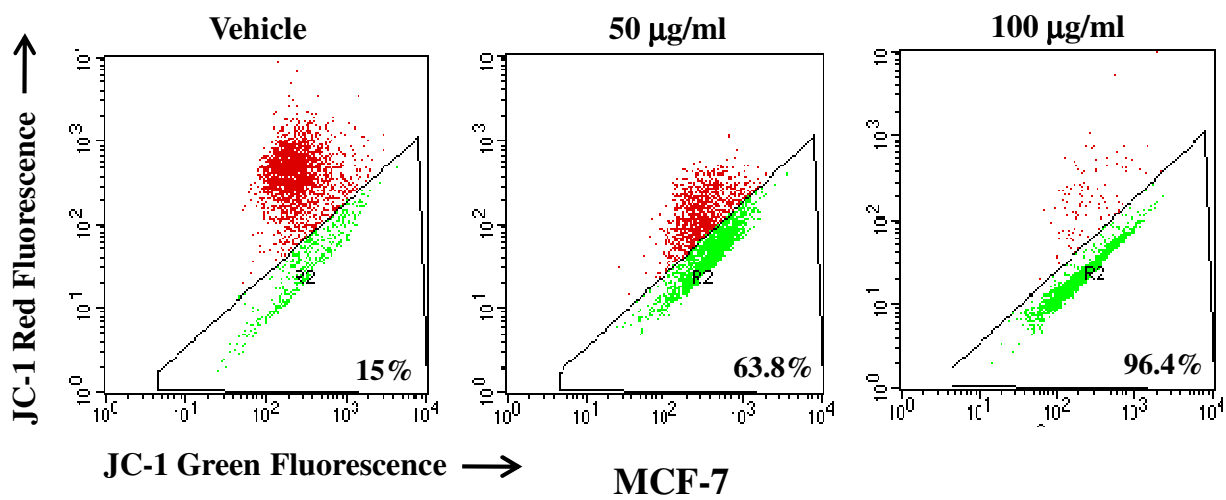
**Supplementary Information 1. CFEA selectively inhibits breast tumor cell growth**

MCF-7 (red bar) and MCF-10A (violet bar) cells were treated with different doses of CFEA and FDA approved standard anticancer drugs Doxorubicin, Paclitaxel, and 5-Fluorouracil for 48 hours and percent cell viability was assessed by SRB assay. Columns, average of quadriplate readings of samples; error bars,  $\pm$  S.D.

## Supplemental Information

<b>Coordinate</b>	<b>Target/Control</b>	<b>Coordinate</b>	<b>Target/Control</b>
<b>A1, A2</b>	<b>Positive Control</b>	<b>C13, C14</b>	<b>HO-2</b>
<b>A23, A24</b>	<b>Positive Control</b>	<b>C15, C16</b>	<b>HSP27</b>
<b>B1, B2</b>	<b>Bad</b>	<b>C17, C18</b>	<b>HSP60</b>
<b>B3, B4</b>	<b>Bax</b>	<b>C19, C20</b>	<b>HSP70</b>
<b>B5, B6</b>	<b>Bcl-2</b>	<b>C21, C22</b>	<b>HTRA2/Omi</b>
<b>B7, B8</b>	<b>Bcl-x</b>	<b>C23, C24</b>	<b>Livin</b>
<b>B9, B10</b>	<b>Pro-Caspase-3</b>	<b>D1, D2</b>	<b>PON2</b>
<b>B11, B12</b>	<b>Cleaved Caspase-3</b>	<b>D3, D4</b>	<b>p21/CDNK1A</b>
<b>B13, B14</b>	<b>Catalase</b>	<b>D5, D6</b>	<b>p27/Kip1</b>
<b>B15, B16</b>	<b>cIAP-1</b>	<b>D7, D8</b>	<b>Phospho-p53(S15)</b>
<b>B17, B18</b>	<b>cIAP-2</b>	<b>D9, D10</b>	<b>Phospho-p53(S46)</b>
<b>B19, B20</b>	<b>Claspain</b>	<b>D11, D12</b>	<b>Phospho-p53(S392)</b>
<b>B21, B22</b>	<b>Clusterin</b>	<b>D13, D14</b>	<b>Phospho-Rad17</b>
<b>B23, B24</b>	<b>Cytochrome c</b>	<b>D15, D16</b>	<b>SMAC/Diablo</b>
<b>C1, C2</b>	<b>TRAIL R1/DR4</b>	<b>D17, D18</b>	<b>Survivin</b>
<b>C3, C4</b>	<b>TRAIL R2/DR5</b>	<b>D19, D20</b>	<b>TNFR1/TNFRSF1A</b>
<b>C5, C6</b>	<b>FADD</b>	<b>D21, D22</b>	<b>XIAP</b>
<b>C7, C8</b>	<b>Fas/TNFSF6</b>	<b>D23, D24</b>	<b>PBS (-ve Control)</b>
<b>C9, C10</b>	<b>HIF-1<math>\alpha</math></b>	<b>E1, E2</b>	<b>Positive Control</b>
<b>C11, C12</b>	<b>HO-1</b>		

**Supplementary Information 2.** Proteome profiler apoptotic array spot coordinates for target proteins in duplicates were enlisted.



**Supplementary Information 3.** MCF-7 cells treated with either vehicle or CFEA at different concentrations for 24 hours, were stained with JC-1 dye and the loss of mitochondrial membrane potential was assessed by flow cytometry. Representative of three independent experiments.