

Article

# Sorafenib Chemosensitization by Caryophyllane Sesquiterpenes in Liver, Biliary, and Pancreatic Cancer Cells: The Role of STAT3/ABC Transporter Axis

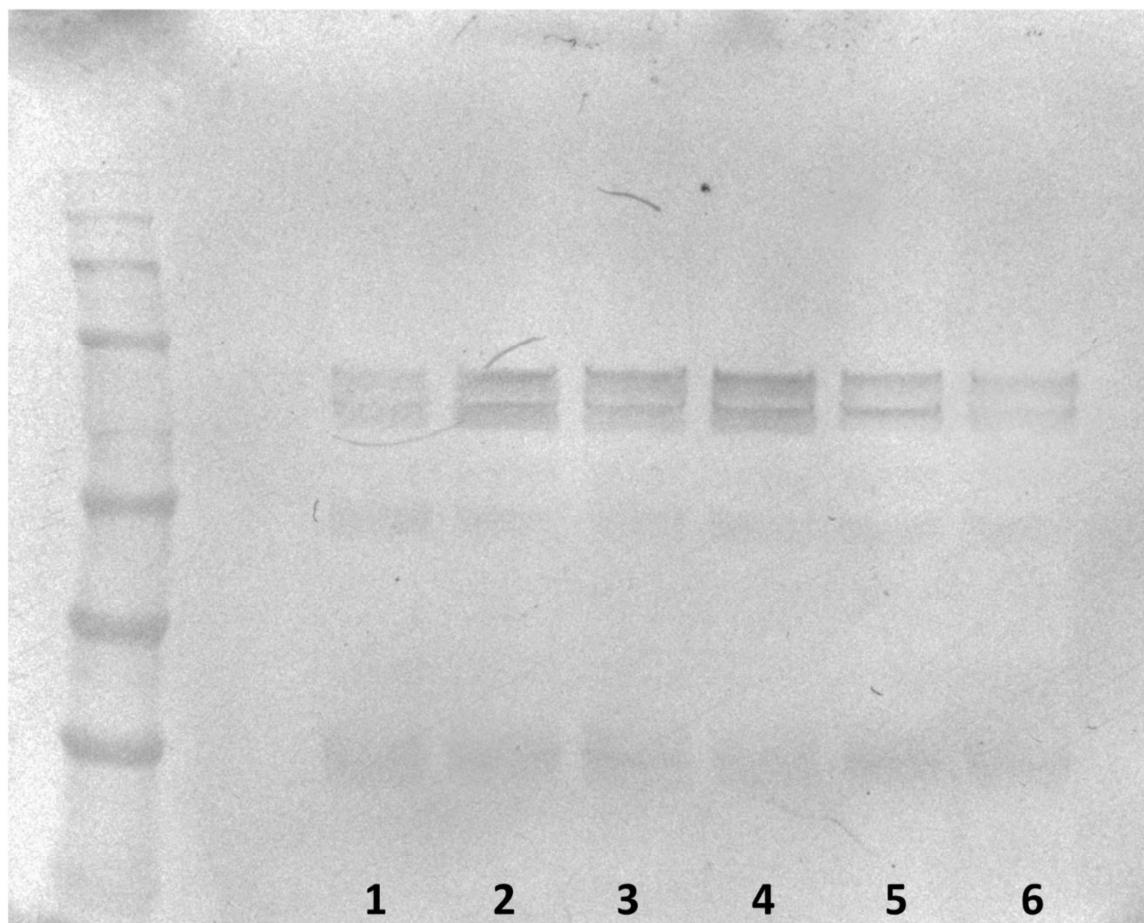
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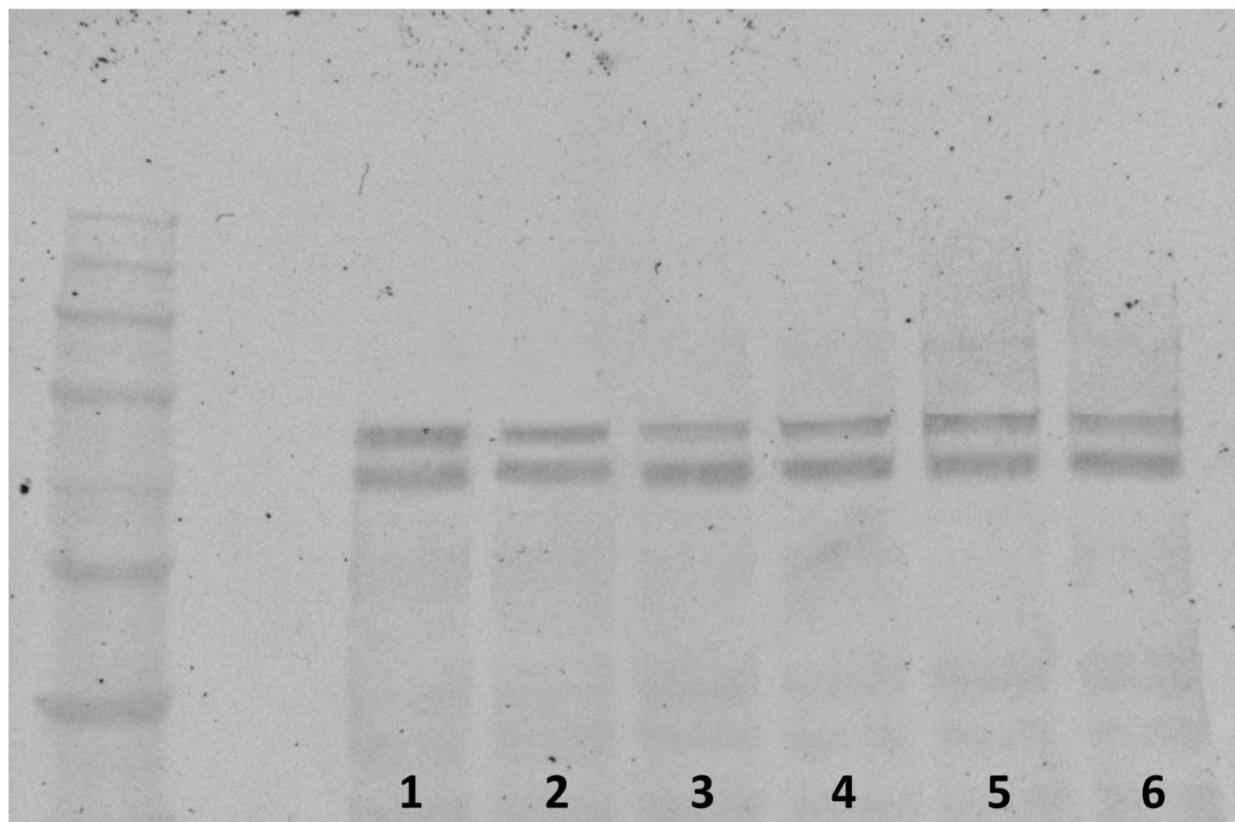
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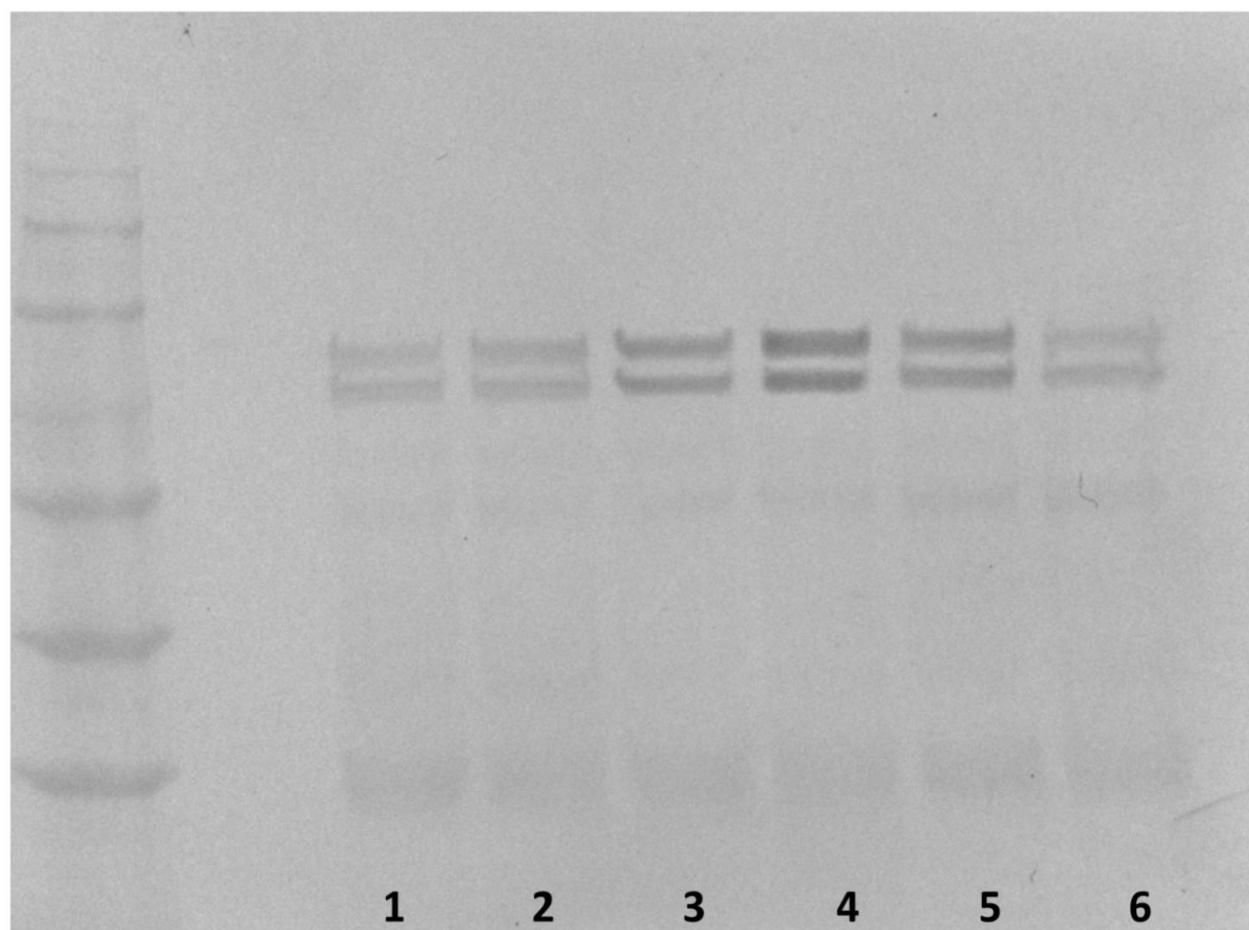
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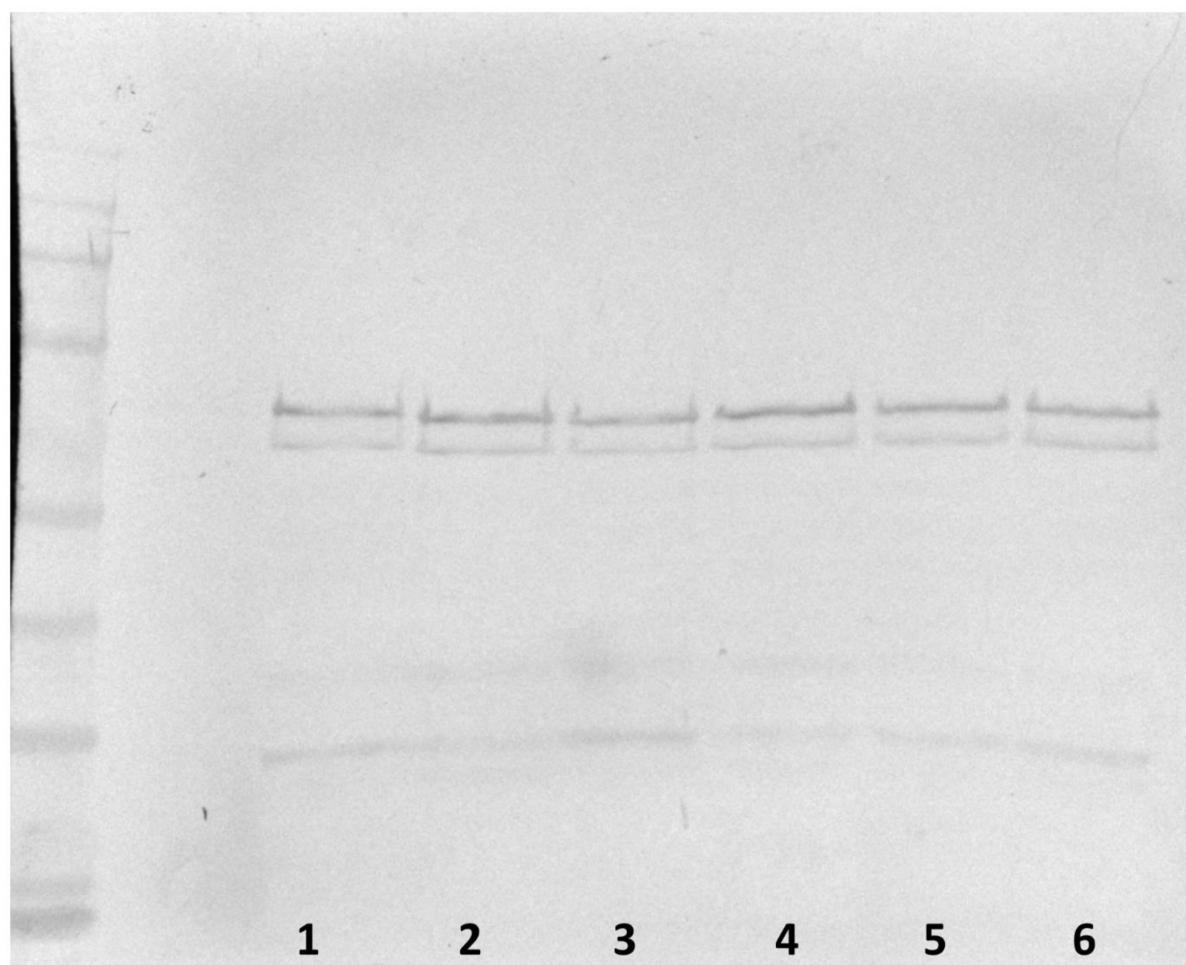
**Figure S1.** Original image of western blotting analysis regarding STAT3 phosphorylation at tyrosine 705 residue (membrane 1). 1) Control; 2)  $\beta$ -caryophyllene 10  $\mu$ g/mL; 3)  $\beta$ -caryophyllene oxide 10  $\mu$ g/mL; 4) sorafenib 10  $\mu$ g/mL; 5)  $\beta$ -caryophyllene 10  $\mu$ g/mL + sorafenib 10  $\mu$ g/mL; 6)  $\beta$ -caryophyllene oxide 10  $\mu$ g/mL + sorafenib 10  $\mu$ g/mL.



**Figure S2.** Original image of western blotting analysis regarding total STAT3 (membrane 1). 1) Control; 2)  $\beta$ -caryophyllene 10  $\mu\text{g}/\text{mL}$ ; 3)  $\beta$ -caryophyllene oxide 10  $\mu\text{g}/\text{mL}$ ; 4) sorafenib 10  $\mu\text{g}/\text{mL}$ ; 5)  $\beta$ -caryophyllene 10  $\mu\text{g}/\text{mL}$  + sorafenib 10  $\mu\text{g}/\text{mL}$ ; 6)  $\beta$ -caryophyllene oxide 10  $\mu\text{g}/\text{mL}$  + sorafenib 10  $\mu\text{g}/\text{mL}$ .



**Figure S3.** Original image of western blotting analysis regarding STAT3 phosphorylation at tyrosine 705 residue (membrane 2). 1) Control; 2) Verapamil 1  $\mu\text{g}/\text{mL}$ ; 3) MK571 1  $\mu\text{g}/\text{mL}$ ; 4) Sorafenib 10  $\mu\text{g}/\text{mL}$ ; 5) Verapamil 1  $\mu\text{g}/\text{mL}$  + sorafenib 10  $\mu\text{g}/\text{mL}$ ; 6) MK571 1  $\mu\text{g}/\text{mL}$  + sorafenib 10  $\mu\text{g}/\text{mL}$ .



**Figure S4.** Original image of western blotting analysis regarding total STAT3 (membrane 2). 1) Control; 2) Verapamil 1  $\mu\text{g}/\text{mL}$ ; 3) MK571 1  $\mu\text{g}/\text{mL}$ ; 4) Sorafenib 10  $\mu\text{g}/\text{mL}$ ; 5) Verapamil 1  $\mu\text{g}/\text{mL}$  + sorafenib 10  $\mu\text{g}/\text{mL}$ ; 6) MK571 1  $\mu\text{g}/\text{mL}$  + sorafenib 10  $\mu\text{g}/\text{mL}$ .