Molecular Pharmacology

Antileukemic activity and mechanism of drug resistance to the marine

Salinispora tropica proteasome inhibitor salinosporamide A (marizomib)

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Supplemental figures

Figure S1. Impact of salinosporamide A compared to bortezomib on proteasome catalytic activity in parental and bortezomib-resistant CEM cells. Chymotrypsin-like, caspase-like, and trypsin-like proteasome activity was analyzed by Proteasome-Glo assay in intact (A) parental CEM/WT cells, and (B) bortezomib-resistant CEM/BTZ200 cells after 1-hour exposure to salinosporamide A (Sal A) or bortezomib (BTZ). Results are presented relative to untreated controls and represent the mean (± standard deviation) of three independent experiments.

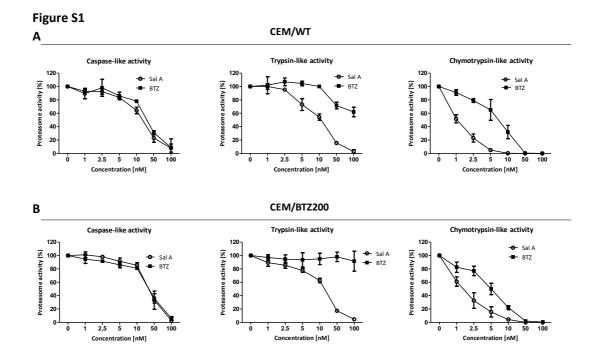


Figure S2. Impact of salinosporamide A on proteasome catalytic activity in parental and bortezomib-resistant CEM cells. β 5, β 5i, and β 1i-associated catalytic activity in cell extracts of CEM/WT, CEM/BTZ7, and CEM/BTZ200 cells was assessed after 1-hour exposure to salinosporamide A. Results depicted represent the mean (\pm standard deviation) of 3 separate experiments.

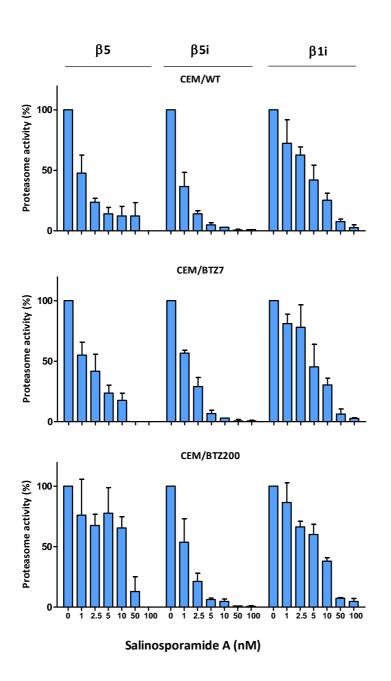


Figure S3. Accumulation of ubiquitinated proteins in parental CEM and salinosporamide A-resistant CEM cells after salinosporamide A exposure. Western blot analysis of accumulation of polyubiquitinated proteins in untreated cells, after 24h exposure to salinosporamide A (10 nM for CEM/WT, 30 nM and 60 nM for CEM/S30).

Ubiquitinated proteins

