toxins

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Article

Cytotoxicity Effect of Quinoin, Type 1 Ribosome-Inactivating Protein from Quinoa Seeds, on Glioblastoma Cells

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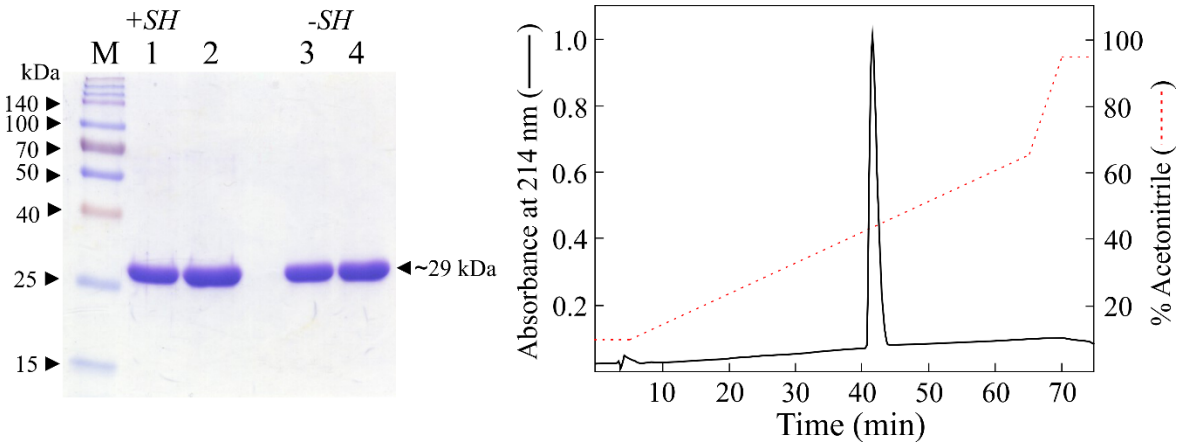

Figure S1. (A) SDS-PAGE analysis of the purified quinoin with or without β-Mercaptoethanol (lanes 1-2 and 3-4; 3.0 and 6.0 μg, respectively; M, protein markers). SDS-PAGE was carried out in 12% polyacrylamide separating gel. (B) Elution profile of purified quinoin by RP-HPLC. Quinoin (100 μg) was separated on a C4 column (Phenomenex, 0.46x25 cm), using a Waters Breeze HPLC system. The elution system contained 0.1% trifluoroacetic acid (TFA) in H2O (solvent A) and 0.1% TFA in acetonitrile (solvent B). A gradient elution system was applied from 5% to 65% of solvent B in 60 minutes at a flow rate of 1 mL/min.

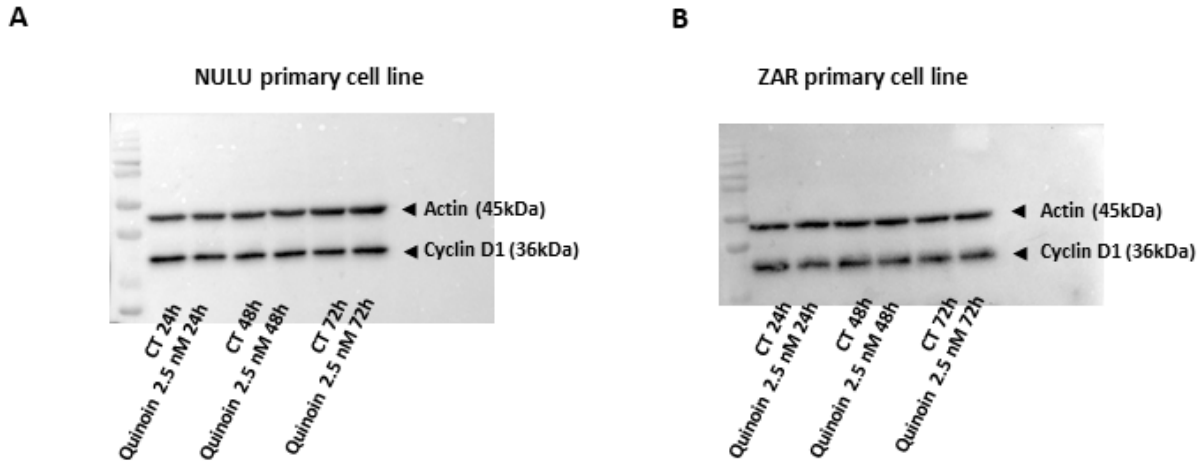

Figure S2. Western Blot analysis of Cyclin D1 in primary glioblastoma cell lines NULU (A) and ZAR (B) treated with Quinoin 2.5 nM for 24, 48 and 72 h.

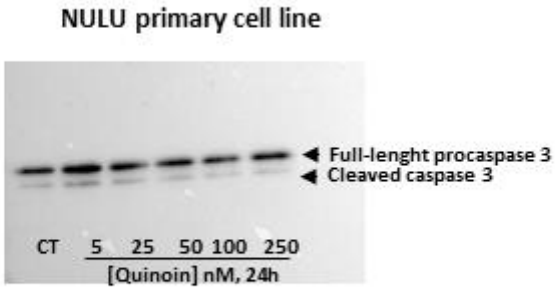

Figure S3. Western Blot analysis of Caspase 3 in primary glioblastoma cells NULU treated with Quinoin 5, 25, 50, 100 and 250 nM for 24 h. The blot revealed the presence of activated form of caspase 3.