

Supporting Information for:

PAC-1 Activates Procaspase-3 through Relief of Zinc-Mediated Inhibition

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Supporting Information Table of Contents

Supplementary Figures

Figure S1. Caspase-3 activity assay with PAC-1a

Figure S2. Procaspase-3 activity assay with PAC-1a

Figure S3. Procaspase-3 (D9A/D28A/D175A) activity assay with PAC-1a

Figure S4. Absorbance Spectra of PAC-1a titrated with ZnSO₄

Figure S5. Absorbance Spectra of EGTA competition titration

Supplementary Figures

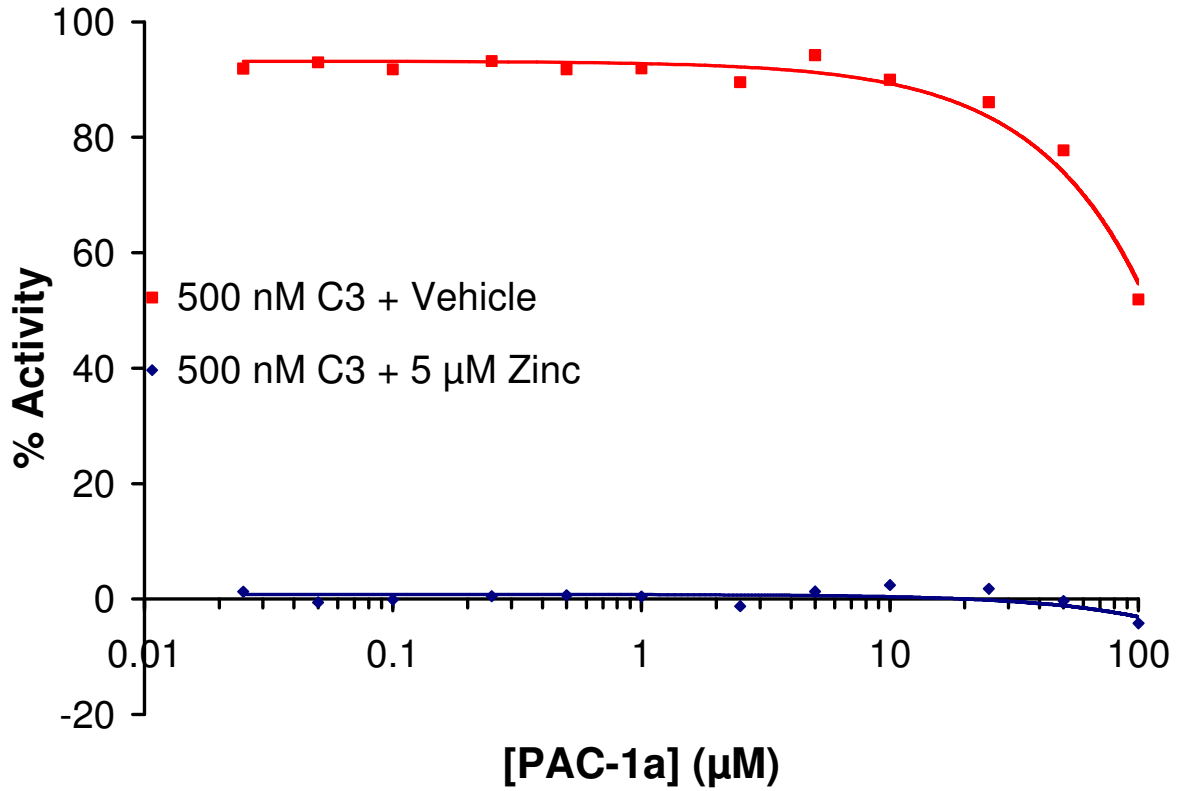


Figure S1. PAC-1a does not enhance caspase-3 (C3) activity when assayed in a buffer containing 5 µM ZnSO₄. PAC-1a actually inhibits this enzyme at high compound concentrations even in the absence of ZnSO₄.

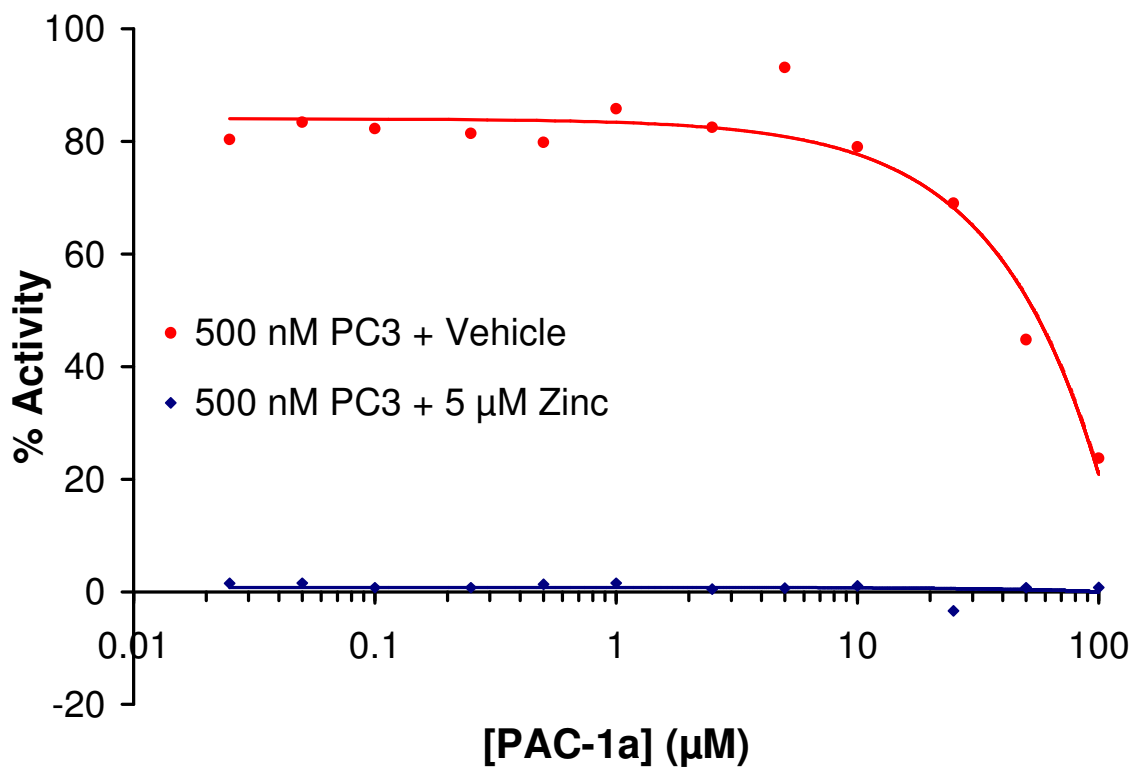


Figure S2. PAC-1 does not enhance procaspase-3 (PC-3) activity when assayed in a buffer containing 5 μM ZnSO₄. PAC-1a actually inhibits this enzyme at high compound concentrations even in the absence of ZnSO₄.

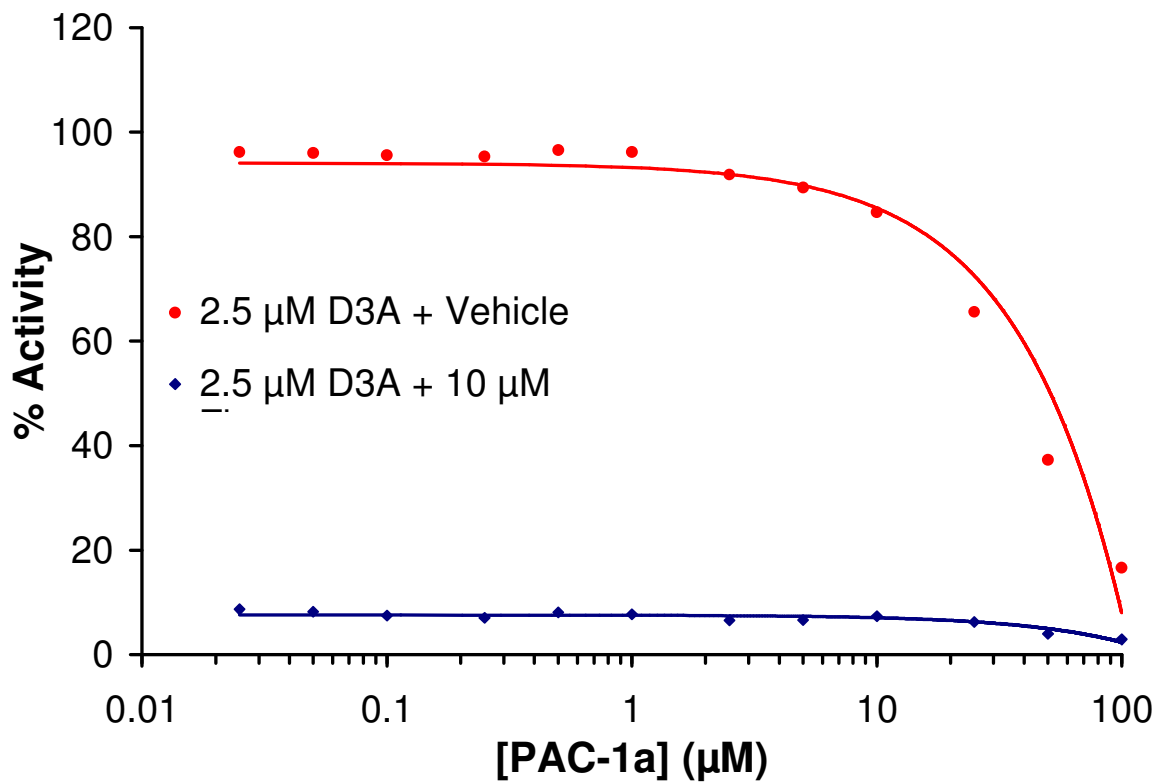


Figure S3. PAC-1 enhances the procaspase-3(D9A/D28A/D175A) (D3A) mutant activity when assayed in a buffer containing 5 μM ZnSO₄. PAC-1a actually inhibits this enzyme at high compound concentrations even in the absence of ZnSO₄.

Absorbance Spectra of PAC-1a Titrated with Zn

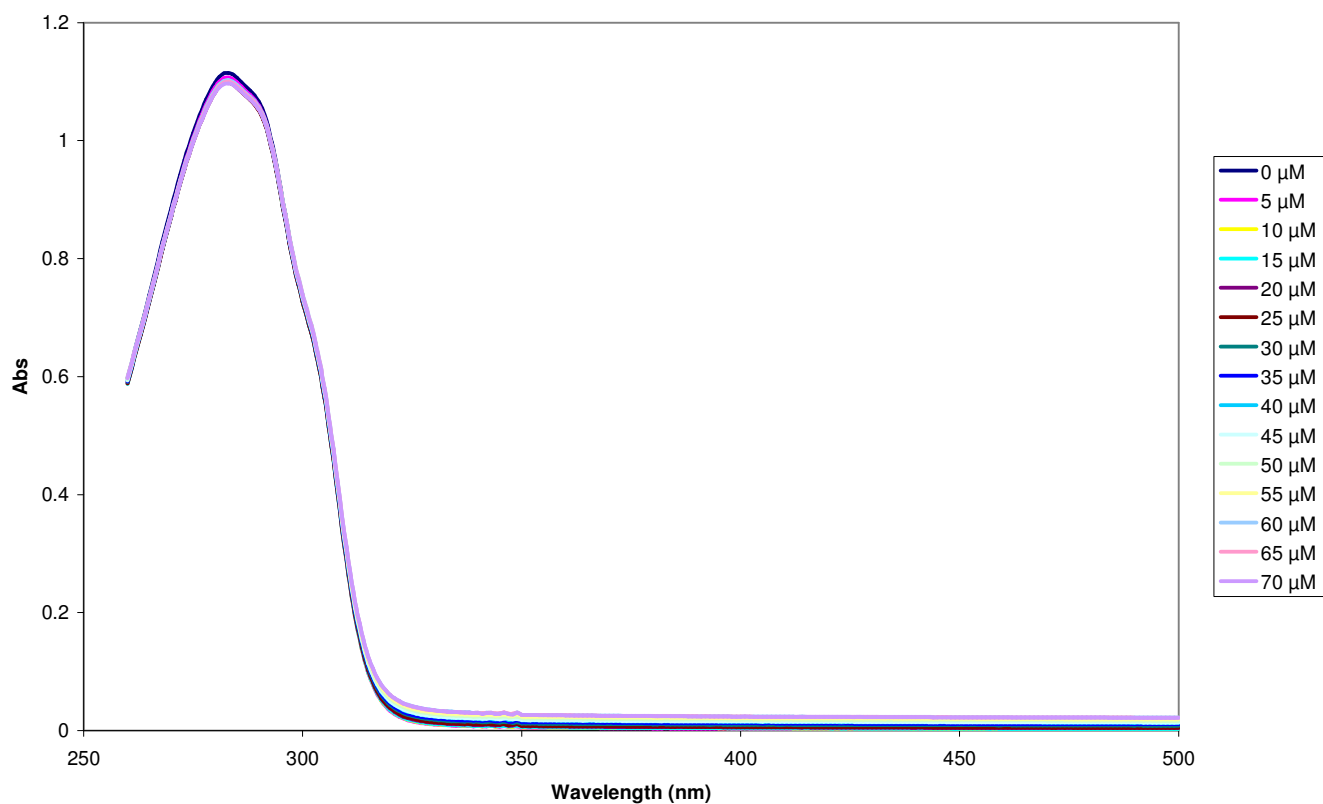


Figure S4. Titration of ZnSO₄ into a solution of PAC-1a (50 μM in 50 mM Hepes, 100 mM KNO₃, pH 7.2 buffer) does not cause a change in the UV-visible spectra of PAC-1a. Shown are ZnSO₄ concentrations of 0 to 70 μM in 5 μM increments.

Absorbance Spectra of a Titration of a PAC-1/Zn Solution with EGTA

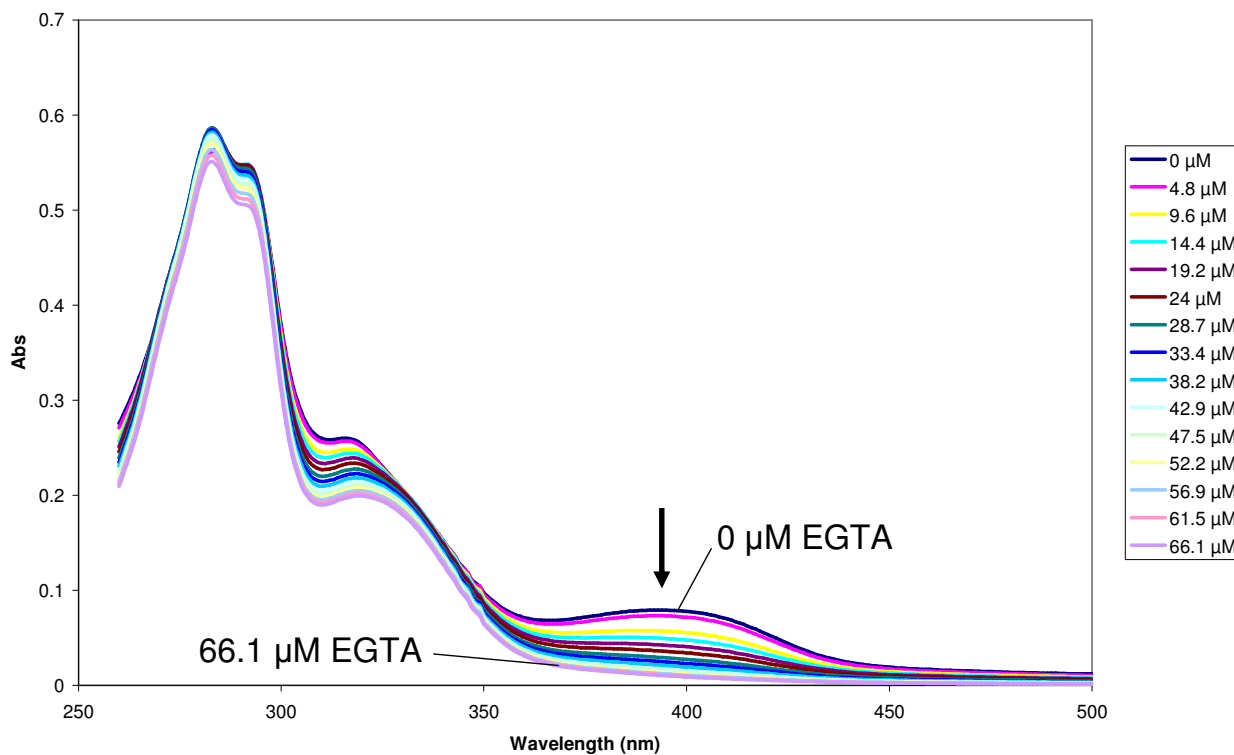


Figure S5. EGTA competition with prebound ZnSO_4 :PAC-1. Titration of EGTA (2.9 mM) into a solution of PAC-1 (32 μM PAC-1, 9.5 μM ZnSO_4 , 50 mM Hepes, 100 mM KNO_3 , pH 7.4) causes a decrease in absorbance at 410 nm. Shown are EGTA concentrations of 0 to 66.1 μM in 4.8 μM increments.