

“A Novel Anti-apoptotic Inhibitor to Induce Cancer Cell Death” VCU #14-090

Applications

- Anti-apoptotic inhibitor
- Induces cell death in Leukemia and Lymphoma
- Applicable to other cancers

Advantages

- Derived from a natural biological basis
- Induces cancer cell death by inhibiting anti-apoptotic pathways
- Potentially less side effects

Inventors

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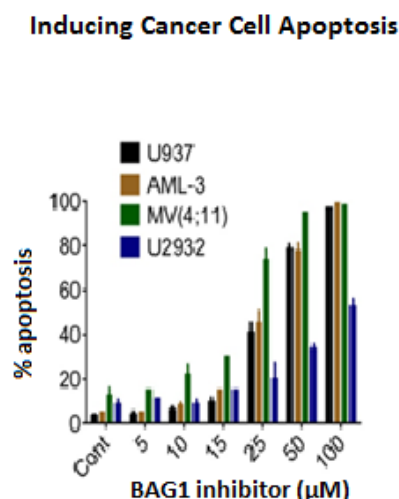
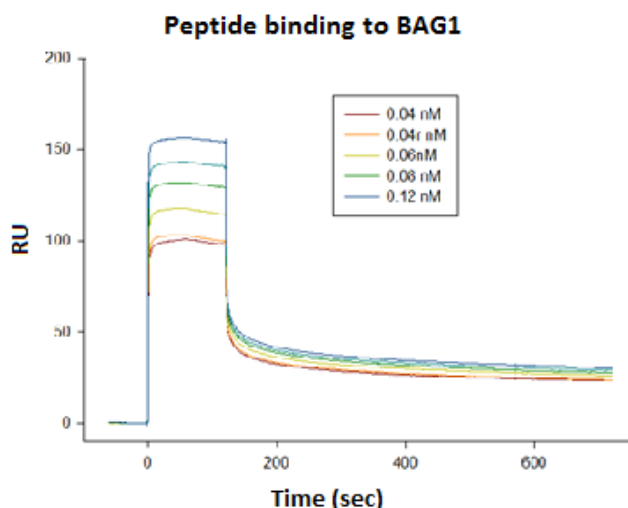
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Technology Summary

This novel inhibitor induces cancer cell death by inhibiting the anti-apoptotic pathway in Leukemia and Lymphoma cells. Due to its natural biological basis, the inhibitor is non-toxic to the environment providing an advantageous process of eliminating cancerous cells in comparison to many chemical-based drugs. This novel peptide is cell-penetrating and binds to the Bcl-2 Associated Anthanogen BAG-1 family to inhibit anti-apoptotic effects.

The following figure displays an in vitro study performed with the BAG-1 inhibitor. From this study, VCU researchers have determined the inhibitor's effectiveness in binding to BAG-1 and inducing cancer cell apoptosis. This inhibitor is applicable to treatment in other cancers that involve BAG-1, thereby expanding its field of use.



Technology Status

Patent pending: U.S. and Foreign rights available

This technology is available for licensing to industry for further development and commercialization.