

Modulators of Mitochondrial Protein Import

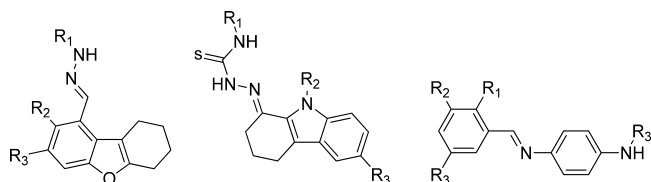
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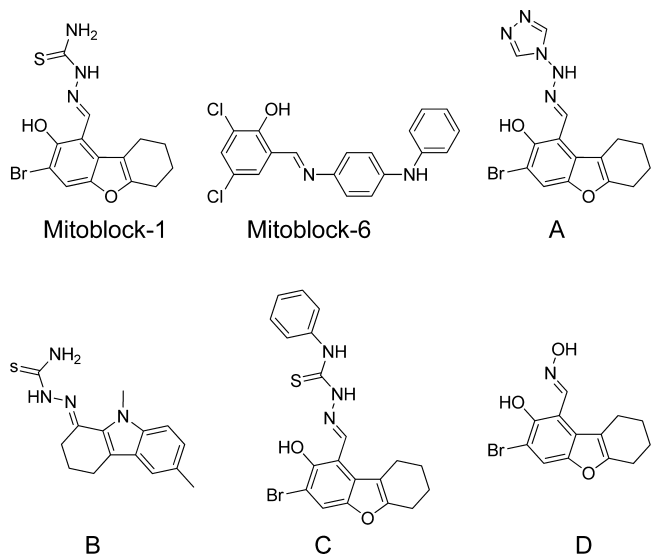
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Title: Modulators of Mitochondrial Protein Import
Patent/Patent Application Number: WO 2012142256 A2
Publication Date: October 18, 2012
Priority Application: US 2011-474724P
Priority Date: April 12, 2011
Inventors: Koehler, C. M.; Hasson, S. A.; Miyata, K.; Tettel, M. A.; Dabir, D.
Assignee Company: The University of California, United States
Disease Area: neurodegenerative disorder, cancer
Biological Target: mitochondrial protein translocation pathway
Summary: This invention provides compounds that modulate protein translocation in mitochondria, thereby modulating the assembly and function of the mitochondrion with respect to protein translocation and import. This class of compounds might be useful for preventing or treating neurodegenerative disorders or cancer.

Important Compound Classes:



Key Structures:



Recent Review Articles:

Peixoto, P. M.; Dejean, L. M.; Kinnally, K. W. The therapeutic potential of mitochondrial channels in cancer, ischemia-reperfusion injury, and neurodegeneration. *Mitochondrion* **2012**, *12* (1), 14–23.

Biological Assays (Description):

Studies on substrate specificity of the TIM22 mitochondrial pathway.

Pharmacological Data:

Mitoblock-1 inhibits the import of substrates that use the TIM22 import pathway.

Claims:

Claims 17: Use of compounds for the treatment of deafness–dystonia syndrome, Alzheimer’s disease, Parkinson’s disease, and cancer.

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Notes

The author declares no competing financial interest.

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