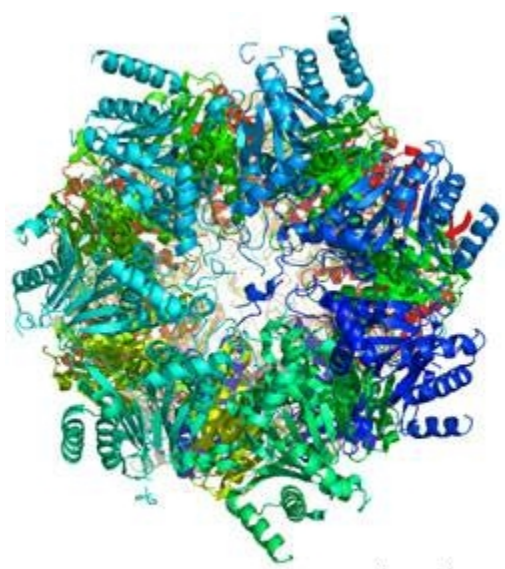
Synthesis Of Syrbactin Proteasome Inhibitors

Tech ID: 21583 / UC Case 2010-261-0

BRIEF DESCRIPTION

The ability of natural products and other compounds to act as proteasome inhibitors has attracted significant interest because of the wide range of cellular substrates and processes controlled or affected by the ubiquitin-proteasome pathway.

UCR Researchers have achieved the synthesis of novel compounds useful for regulating the ubiquitin-proteasome pathway. They can be prepared in just a few steps, in high efficiency, and in good quantity, as would be needed for a manufacturing process.



Yeast 20S proteasome in complex with bortezomib (not shown) - top view (PDB 2f16)

Due to the role of the ubiquitin-proteasome pathway in important cellular processes such as apoptosis, and cellular proliferation , the inhibition of the proteasome has been recognized as a useful property for the development novel anti-cancer therapeutics.

In addition to cancer therapy, it is envisioned that molecules that specifically inhibit the proteasome such as those in this invention could have other uses, including as drugs for autoimmune diseases or as agrochemical and possibly antibacterial agents.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,359,309	06/07/2016	2010-261
United States Of America	Issued Patent	9,221,772	12/29/2015	2010-261

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OTHER INFORMATION

KEYWORDS

Syrbactin, Proteasome, Proteasome Inhibitor, Cancer

CATEGORIZED AS

- **Biotechnology**
  - Proteomics
- **Medical**
  - Diagnostics

RELATED CASES

2010-261-0

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