ACS Medicinal Chemistry Letters

PATENT HIGHLIGHT

pubs.acs.org/acsmedchemlett

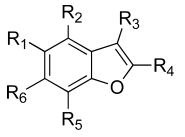
Substituted Benzofurans as Inhibitors of HCV NS5B Protein

Gerard Rosse*

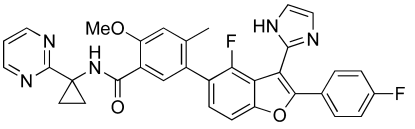
Structure Guided Chemistry, Dart Neuroscience LLC, 7473 Lusk Boulevard, San Diego, California 92121, United States, and Adjunct Associate Professor, Department of Pharmacology and Physiology, College of Medicine, Drexel University, New College Building, 245 North 15th Street, Philadelphia, Pennsylvania 19102, United States

Title:	Substituted Benzofurans as Inhibitors of HCV NS5B Protein		
Patent/Patent Application Number:	US 2013−755971	**Publication date:**	January, 31, 2013
Priority Application:	US 2012-596500P	**Priority date:**	February 8, 2012
Inventors:	Yeung, K.-S.; Kadow, J. F.		
Assignee Company:	Bristol-Myers Squibb Company, USA		
Disease Area:	HCV infection	**Biological Target:**	HCV NS5B protein
Summary:	This application claims a series of benzofuran analogues inhibits HCV NS5B protein and may provide a treatment against HCV infections.		

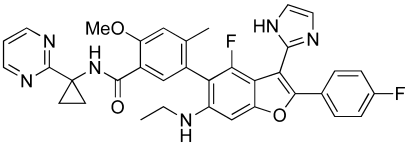
Important Compound Classes:



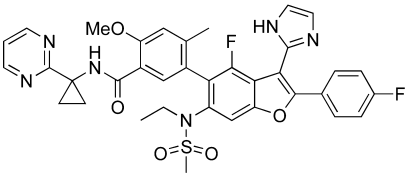
Key Structures:



Compound 1



Compound 2



Compound 3

Biological Assay: An on-bead solid-phase homogeneous assay was used to asses NS5B inhibitors. Compound efficacy was evaluated using HCV replicon luciferase assay.

Pharmacological Data:

	NS5B Inhibition (IC_{50}, μM)	HCV replicon assay (EC_{50}, μM)
Compound 1	0.030	0.030
Compound 2	NT	0.0072
Compound 3	NT	0.0090

Synthesis: Preparation of 3 compounds.

AUTHOR INFORMATION

Corresponding Author

*E-mail: grosse@dartneuroscience.com.

Notes

The authors declare no competing financial interest.

Special Issue: HCV Therapies

Received: September 16, 2013
Published: September 27, 2013