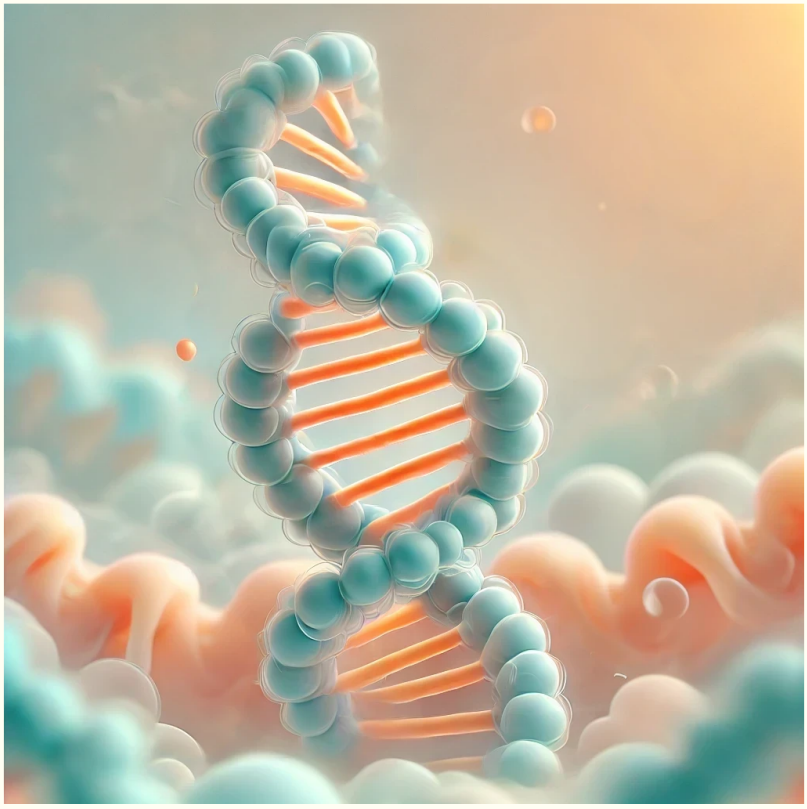
RNA-Binders

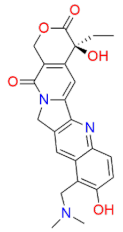
RNA molecules play a crucial role in transferring cellular information and regulating gene activity, and they have been associated with numerous human diseases. Small molecules, whether synthetic or natural, designed to specifically bind to certain RNA structures—called RNA binders—are vital for managing cellular processes. These RNA binders are being investigated for therapeutic applications, especially for conditions linked to RNA misregulation, such as cancer, neurodegenerative diseases, as well as in understanding viral mechanisms and bacterial regulation.

Compounds in our **Library of RNA-Binders** bind to key regions such as **expanded repeats** associated with Fragile X syndrome, Huntington's disease, and Myotonic dystrophy, as well as viral response elements like the **HIV-1 Rev Response Element (RRE)**. Additionally, we offer ligands for **bacterial riboswitches** and small **nuclear ribonucleoproteins (snRNPs)** involved in splicing complexes. Each compound is accompanied by detailed information about the RNA binding region, including whether it interacts with mRNA, snRNA, or splicing complexes.

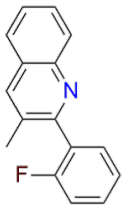
Related Terms: *mRNA, RNA-binding, Exon, Riboswitch, RRE.*



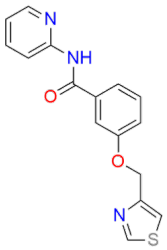
Highlights



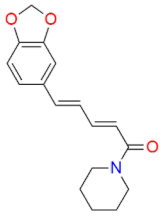
EBC-07866
Topotecan is an antineoplastic agent that works by inhibiting DNA topoisomerases.



EBC-550079
It inhibits the expression of Creuzfeld-Jakob Disease prion proteins at the level of message translation.



EBC-550078
It targets the toxic RNA that causes myotonic dystrophy type 1.



EBC-06745
Piperine exhibits antianaphylactic effects through regulating Mas-related G-protein coupled receptor member X2 activation.

Library Composition

Name	Occurrence in the library, times
Expanded Repeats	5
Riboswitch	4
Rev Response Element (RRE)	1
Splicing Complex	1