

DRUG DISCOVERY EXPERTISE FOR RNA TARGETS

- ▶ Leading expertise leveraging outstanding sciences and cutting edge technologies to address targeting RNA and RNA: protein complexes
- ▶ Substantial record of accomplishment with a variety of DNA and RNA modifying enzymes, including deacytlases, demethylases, acetyltransferases, ligases, helicases and methyltransferases
- ▶ Established new focus on coding and non-coding RNA targets

AREAS OF EXPERTISE

In Vitro transcription

Structural Biology
on RNA Molecules

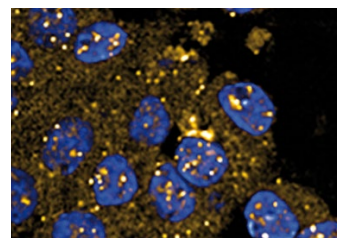
Hit ID of small
molecule binders

Orthogonal Hit
qualification

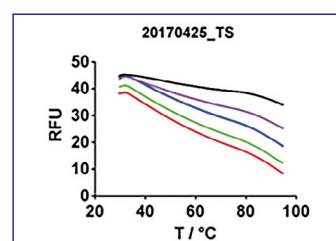
Sequencing technologies

Evotec platforms enable identification of suitable RNA targets, find drug-like compounds that bind RNA pockets, evaluate the biological impact of binding and optimise drug candidates. Our HitID platforms include leading edge-technologies and tools, curated chemical libraries, RNA specific assays and a medicinal chemistry mindset to address the unique chemical space of RNA ligands.

Evotec offers industry leading expertise in RNA and RNA: protein complex relevant assay technologies, including RapidFire™ mass spectrometry assays (RF/MS), affinity screening by online size exclusion chromatography coupled to mass spectrometry detection (SEC-LC/MS), Illumina single cell sequencing/Nanopore multiplexed sequencing and Switch Sense Technology.



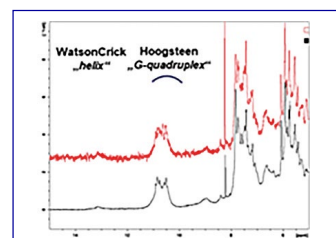
In situ hybridisation



Thermal shift assay

HIT ID PLATFORM FOR RNA TARGETS

- ▶ HTS ready formats
 - Fluorescence Intensity
 - Fluorescence Polarisation
 - Displacement Assays
 - Luminescence
 - SEC-LC/MS
 - Single cell sequencing
- ▶ Orthogonal read-out technologies
 - Surface Plasmon Resonance/SPR
 - Nuclear Magnetic Resonance/NMR
 - Thermal Shift
 - Microscale Thermophoresis
 - SwitchSense



NMR spectrum from RNA

TARGET VALIDATION/ENGAGEMENT

- ▶ Sequencing based approaches
 - Pull Down Assays
 - SHAPE-Seq
 - nanoSHAPE-Seq
 - RNA-Seq
- ▶ Cellular based assays
 - CRISPR
 - FISH
 - ICC
 - qRT-PCR/bDNA
 - Immunoassays

With thousands of novel coding and non-coding RNAs being identified, Evotec can support the demands of RNA-oriented drug discovery to find novel disease intervention points by the systematic discovery of RNA ligand interactions on an industrial scale.