HITGEN

OpenDEL™

Start Your Journey to Access Vast Chemical Space

5.0

Stock Code: HitGen Inc. (688222.SH)

OpenDEL™ -- Empowering Your Drug Discovery Journey

- **Hit Discovery**
  Identify novel compounds directly from the OpenDEL library
- **AI/ML**
  Use post-selection DEL for prediction of new chemical space outside of DEL
- **Target Ligandability**
  Perform screening of novel targets to assess their ligandability

OpenDEL™ -- Fully Transparent Open Access

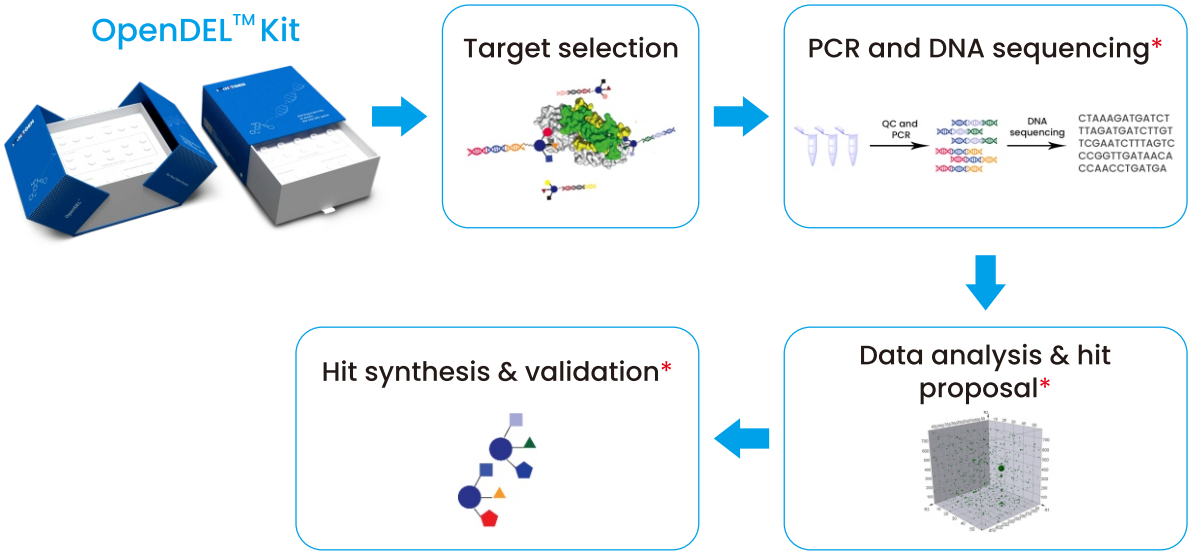
- **The Kit**

  OpenDEL™ - Small Molecule Library
  - 57 Libraries
  - 12 2-Cycle Libraries, ~20M Compounds
  - 45 3-Cycle Libraries, ~3.8Bn Compounds

  OpenDEL™ - Macrocycle Library
  - 1 Macrocycle Library +1 Linear Control
  - ~200M Compounds

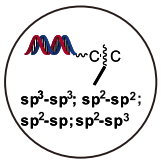
- **Access to**
  - Small Molecule/Macrocycle Structures
  - Building Blocks
  - Scaffolds
  - DNA Codons
  - Selection Manual
- **No Structure Disclosure Fee**
- **No Compound IP License Fee**

OpenDEL™ -- Expert Discovery Science at Your Disposal



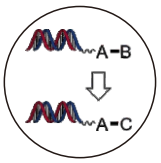
*Post-selection services available at HitGen

Chemistry Diversity



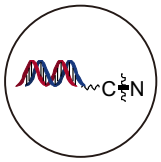
C-C Bond Formation

- Indole C3 alkylation
- Suzuki coupling
- Photoredox
- Sonogashira coupling



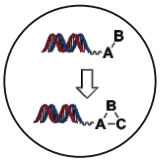
Functional Group Transformation

- NO_2 to amine
- Azide to amine
- Amine to azide
- Halide to azide
- Halide to amine
- Halide to alkyne
- Halide to acid
- Halide to cyanide
- Aldehyde to alkyne
- Alkene to aldehyde
- Thioether oxidation



C-N Bond Formation

- Acylation
- Reductive Amination with Aldehyde
- Reductive Amination with Ketone
- Buchwald-Hartwig Cross Coupling
- SN_2/SN_{Ar}
- Sulfonylation



In-situ Heterocycle Formation

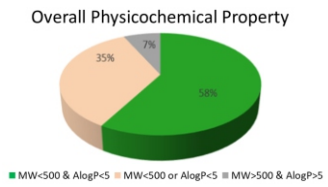
- Triazoles
- Imidazolindinone
- Pyridones
- 1,2,4-oxadiazole
- Isoindolinone
- Benzimidazole
- Benzotriazole
- Indazolone
- 2-pyridinone

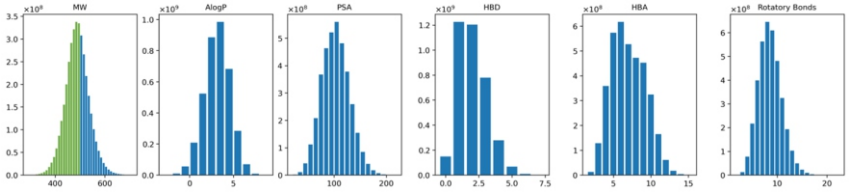
Building Block/Scaffold Diversity

- Mono-functional group BBs: **>20,000**
- Bi-functional group BBs: **>3,000**
- Novel scaffolds: **>550**

BBs: amines, acids, aldehydes, boronates, protected amino acids, free amino acids, amino esters,diamines, acid-aldehydes, acid-aryl-halides, etc.

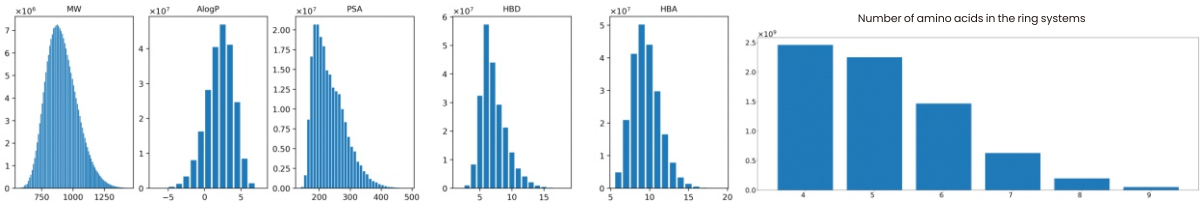
Physicochemical Properties of OpenDEL™ Small Molecules





	Average MW (Da)	MW<500 & AlogP<5	MW<550	MW<500	MW<450
2-Cycle DELs	419	86.8%	99.7%	94%	67%
3-Cycle DELs	484	58%	90.6%	60.7%	19%

Physicochemical Properties of OpenDEL™ Macrocycles



Customer Testimonial

HitGen OpenDEL™ Shows Superior Performance in AI-Driven Hit Discovery

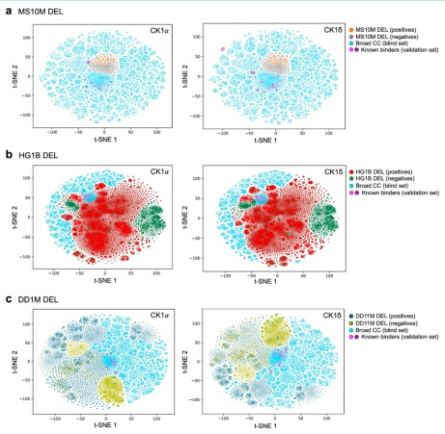


Fig.1 Chemical space comparison

Validated Success

- Highest confirmation rates
- Optimal drug-like properties
- Nanomolar binders

Iqbal, S., Jiang, W., Hansen, E. et al. Evaluation of DNA encoded library and machine learning model combinations for hit discovery. *npj Drug Discov* 2, 5 (2025). https://doi.org/10.1038/s44386-025-00007-4

OpenDEL™ — Meeting Customer Needs Through Choice

01 Small Molecule Library
- 57 small molecule libraries
- ~3.8 billion compounds
- 10 selection samples

02 Small Molecule Library + Macrocycle Library Combo
- 57 small molecule libraries, ~3.8 billion compounds
- 1 macrocycle library and 1 linear control, ~200M compounds
- 2 x 10 selection samples

03 Macrocycle Library
- 1 macrocycle library and 1 linear control, ~200M compounds
- 4-10 amino acids in the ring
- 10 selection samples

HitGen Inc.

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