



# The Boehringer Ingelheim ChemKit

Presented with a selection of chemical building blocks, how would you validate chemical transformations for the rapid synthesis of complex chemical structures?

Answers to this [question](#) including a proposal for collaboration can only be considered if they arrive no later than May 11, 2026, 11:59 pm PST.

# Table of contents

Summary .....	2
Background.....	2
What potential proposals could be in scope? .....	4
What potential proposals would be out of scope?.....	5
What benefits do we offer to you in exchange for having submitted a proposal?.....	5
Key Criteria for the selection of proposals.....	5
References.....	5
Anticipated Timelines.....	6
Submitting a proposal .....	6
Terms and conditions .....	6

## Summary

The Boehringer Ingelheim ChemKit collection aims to accelerate innovation in synthetic chemistry by providing open access to high-quality, structurally diverse building blocks. This initiative addresses the need for robust and versatile chemical transformations, which are essential for developing therapies for diseases with challenging biological targets.

In conjunction with the Frontiers in Medicinal Chemistry symposium that will be held at the University of Münster, Germany, from March 24 – 27, 2026, we make this unique collection again available for a short time<sup>1</sup>.

Researchers from academia, industry, and interdisciplinary fields are invited to explore and develop novel synthetic methodologies using these building blocks. Selected building blocks from Boehringer Ingelheim's extensive chemical library will be shared to expedite the discovery and development of new synthetic methodologies. We invite you to submit your proposals through May 10, 2026. The 20 best proposals will receive again open access to high-quality, structurally diverse building blocks to support the development of robust and versatile chemical transformations, which are essential for creating therapies targeting diseases with challenging biological mechanisms.

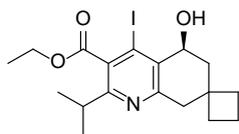
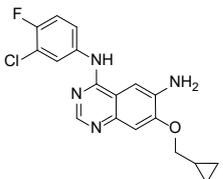
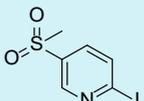
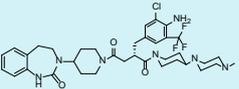
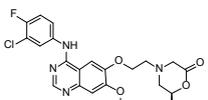
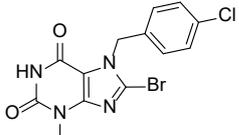
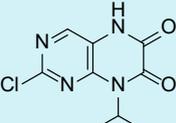
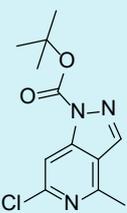
## Background

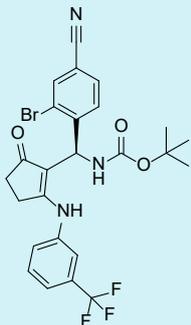
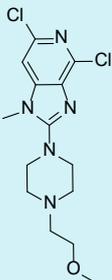
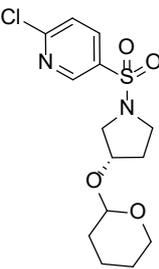
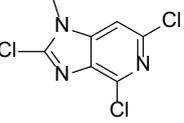
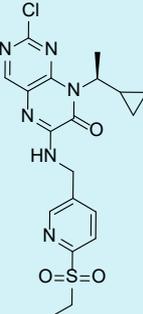
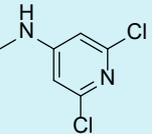
The need for robust and versatile chemical transformations has become increasingly evident as researchers strive to develop therapies for diseases with challenging biological targets. Traditional synthetic methods often fall short by being time-consuming, costly, and inefficient, especially when constructing highly functionalized and structurally diverse molecules. In many cases, these methods fail for molecules with the increased complexity often required in modern drug discovery, resulting in low yields, poor selectivity, or limited scalability. Modern synthetic methods that provide access to highly functionalized molecules, particularly complex arenes and heterocyclic scaffolds, are essential for generating novel drug molecules that address challenging therapeutic targets. However, the limited availability and high cost of complex building blocks limit the possibility of validating new synthetic methodologies in medicinal-chemistry relevant examples. Scientists frequently encounter a cycle in which the absence of relevant building blocks limits the development and testing of methodologies, while unvalidated methodologies restrict their potential applications in drug discovery programs.

To break this cycle, via its open innovation portal, [opnMe.com](https://opnme.com)<sup>2</sup>, Boehringer Ingelheim is launching a new initiative aimed at accelerating innovation in synthetic chemistry. The “Boehringer Ingelheim ChemKit” offers the possibility of challenging the scope of novel synthetic transformations with building blocks containing functional groups and complexity relevant to drug discovery and development. Our goal is to stimulate research on chemical transformations by providing open access to high-quality, structurally diverse and drug-

relevant building blocks. This initiative reflects our commitment to advancing pharmaceutical innovation and enabling scientists to access high-quality resources that can accelerate their research efforts.

We invite researchers from academia, industry, and interdisciplinary fields to explore and develop novel synthetic methodologies using these building blocks. Whether your focus is on reaction development, mechanistic studies, or application in complex molecule synthesis, we welcome your contributions. As an incentive, we are sharing selected building blocks from our extensive chemical library to expedite the discovery and development of novel synthetic methodologies. These compounds have been carefully curated to represent a broad range of chemical space and reactivity profiles. By providing access to these specialized building blocks, we aim to accelerate the development of cutting-edge synthetic methodologies that can overcome these limitations. We will review submitted proposals based on scientific merit, feasibility, and potential impact. The top 20 proposals will be awarded by receiving access to 500 mg of each building block in the ChemKit. Our aim is to foster a vibrant community of researchers working together to push the boundaries of chemical synthesis.

Building block structures	Cas number	Molecular weight [g/mol]	Building block structures	Cas number	Molecular weight [g/mol]
	1332486-44-8	429,30		290304-07-3	358,80
	1412906-52-5	283,08		688018-11-3	718,26
	808793-52-4	420,87		305862-65-7	371,62
	181774-90-5	240,65		2769716-32-5	267,71

Building block structures	Cas number	Molecular weight [g/mol]	Building block structures	Cas number	Molecular weight [g/mol]
	2089391-32-0	550,38		2769717-55-5	344,24
	2417318-58-0	346,83		2769718-26-3	236,48
	1817775-65-7	448,93		1754661-33-3	177,03

## What potential proposals could be in scope?

- In scope are new transformations incorporating these building blocks. We are open to new catalyst classes and ligands. Photochemistry and electrochemistry in combination with a feasible flow approach are also of high interest.
- Application of technologies like catalysis, photochemistry, flow, biocatalysis, mechanochemistry or electrochemistry.
- Safety and scalability propositions are of utmost importance for us and would be favored if the stock is limited.

## What potential proposals would be out of scope?

- Use of the provided substances for any type of *in vitro* or *in vivo* biological experiments
- Addressing any other objectives than novel chemical transformations. This specifically excludes any medicinal chemistry proposals that aim to use subsets of the ChemKit collection for drug discovery or drug design approaches.
- Any “dual use” activities
- Any commercial activities including contract research or manufacturing organizations
- Proposals of participants of the previous opnMe Chemkit call

## What benefits do we offer to you in exchange for having submitted a proposal?

- Access a selected building block library for your research. Each collection will be provided in one shipment, and each building block will be provided as a 500 mg powder containing vial.
- Validate your technology with a set of complex building blocks containing functional groups relevant to drug discovery and development.
- Receive ready-to-use compounds for your screening experiments.
- All free of charge ([proforma custom fees may apply for some countries](#)).
- Publish your results independently and accelerate your research.

## Key Criteria for the selection of proposals

- A brief non-confidential description of your research objectives, proposed experiments, anticipated timelines, and planned start of the project within the next 12 months.
- Proposals should challenge and validate innovative synthesis methodologies to expand their applicability and critically assess any limitations, particularly using building blocks relevant to pharmaceutical contexts.
- Access to a laboratory for carrying out the planned experiments.
- Accept and sign the “rights and obligations” attached at the end of the submission template.

## References

1. As part of an initial opnMe call for ChemKit submissions that took place from October 20 – December 10, 2025, we have obtained 30 research proposals of which 16 have received exclusive access to the ChemKit collection. Our aim is to stimulate additional opportunities, in particular in conjunction with the Frontier in MedChem symposium held in Münster, Germany, from March 24 – 27, 2026.
2. Gollner A., Koester M., Nicklin P., Trieselmann T., Klein E., Vlach J., Heine C., Grundl M., Ramharter J., Wyatt D., Chaturvedi M., Ciulli A., Carter K. C., Müller S., Bischoff D., Ettmayer P., Haaksma E., Mack J., McConnell D., Stenkamp D., Weinstabl H., Zentgraf M., Wood C. R., Montel F. opnMe.com: a digital initiative for sharing tools with the biomedical research

## Anticipated Timelines

Phase 1	Review of Proposals will start after the submission phase and we aim to finalize our review by end of June 2026.
Phase 2	Shipments starting Q3/2026.

## Submitting a proposal

- Check the Boehringer Ingelheim ChemKit profile on [opnMe.com](https://opnMe.com) or alternatively,
- Click the “[Download your submission template](#)” banner to access the collaboration submission template (requires login or registration).
- Follow the instructions to download the template or upload your submission document.
- The upload allows you to attach additional application files if you want to.
- You will be able to access your final submitted collaboration proposal in your personal dashboard and follow its review status.
- Please also visit the [FAQ](#) section on [opnMe.com](https://opnMe.com) to learn more about the call.

## Terms and conditions

In response to your application to the call on [opnMe](https://opnMe.com) to get access to our above-mentioned Boehringer Ingelheim ChemKit ("MATERIAL"), Boehringer Ingelheim International GmbH ("BOEHRINGER") will supply the MATERIAL under the following terms and conditions:

1. All results directly arising from your use of the MATERIAL as well as any intellectual property rights in such results shall be owned by you.
2. The MATERIAL may be used for legitimate non-commercial research purposes only. You represent and warrant that you (i) are affiliated with a research institution or a legal entity performing research activities in the life-science industry sector, (ii) have access to a suitable research laboratory and equipment, and (iii) are not ineligible to receive the Material under applicable laws, ordinances and regulations. To enable BOEHRINGER to ensure your compliance with (i) to (iii) a verification might be necessary. By accepting these terms and conditions you therefore agree that members of the [opnMe](https://opnMe.com) team can contact you to complete this obligatory verification step.
3. THIS MATERIAL IS NOT FOR USE AND WILL NOT BE USED IN HUMAN SUBJECTS AND/OR IN *IN VIVO* TESTING. You will comply with all laws, ordinances and regulations applicable to the handling, storage, use and/or disposal of the MATERIAL.
4. The MATERIAL may not be used for “dual use,” meaning military, defense, or otherwise harmful applications.

5. You are not permitted to distribute the MATERIAL to, or allow access to the MATERIAL by, any third party. You will comply with all international, local, EU and US export control laws and regulations restricting exports, re-exports, transfers or disclosures of the MATERIAL, regardless of the mode of provision.
6. The MATERIAL and all related information that is disclosed to you, including any related intellectual property rights, are and remain the exclusive property of BOEHRINGER, or, in the event of a MATERIAL of a third party having agreed to the provision of such MATERIAL via opnMe.com, the exclusive property of the third party owning the aforementioned rights in the MATERIAL.
7. Any MATERIAL is understood to be experimental in nature and may have hazardous properties. BOEHRINGER MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE MATERIAL WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER PROPRIETARY RIGHTS. The handling, storage, use and/or disposal of the MATERIAL will be at your sole risk. Unless prohibited by law, you and/or your research institution assume all liability for claims for damages by third parties which may arise from the use, storage or disposal of the MATERIAL except that, to the extent permitted by law, BOEHRINGER shall be liable to you and/or your research institution when the damage is caused by the gross negligence or willful misconduct of BOEHRINGER.
8. In any scientific public communications (e.g. oral presentations, posters, scientific articles) where you would disclose the use of the MATERIAL, BOEHRINGER asks you to mention that the MATERIAL has been provided by Boehringer Ingelheim's open innovation platform, opnMe and to name the MATERIAL in the main text, acknowledgement, or supplementary material as the "Boehringer Ingelheim ChemKit".