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is more
than a
chemical

Drug discovery

Chemical probes

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De-risk your drug discovery projects with our new range of chemical probes

Our chemical probes are selective small-molecule modulators of a protein's function allowing the user to ask mechanistic and phenotypic questions about their molecular target in cell-based or animal studies.

Chemical probes represent an important component of both academic and pharmaceutical drug discovery research reducing the technical or biological risks of pursuing the wrong pathway or target before commencing clinical trials. Chemical probes are essential in the validation of new molecular targets for a therapeutic indication.

The table below provides the clear differences between small-molecule drugs and chemical probes.

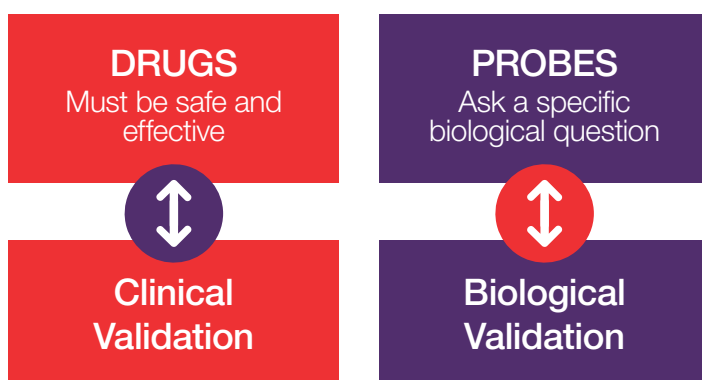


| DRUGS | PROBES |
|---|--|
| Must be safe and effective | Ask a specific biological question |
| May have undefined MoA | Defined MoA required |
| IP restrictions; limited availability | Needs selectivity |
| Must have human bioavailability | Freely available (both the physical compound itself and activity data) |
| High bar for physicochemical (guidelines for MW, lipophilicity, etc.) and pharmaceutical properties (stability, reasonable and economic synthesis, defined crystallization form etc.) | Drug-like properties, such as bioavailability, not necessarily required |
| Article reference: https://www.nature.com/articles/nchembio.1867 | Value is markedly enhanced by use of structurally related inactive and structurally unrelated active compounds |

Figure 1: Comparison of small molecule drugs and chemical probes

Chemical probes can be used to help establish the relationship between a molecular target and the broader biological consequences of modulating that target in cells or organisms. Thus, they can be used to discover new biology relating to that target, to clarify the relationship between the target and a phenotype, and to validate that a particular target is a suitable intervention point to impact the progression or outcome of a disease.

They offer a biological validation rather than a clinical validation of the target.



Protein kinase

| Cat No. | Chemical Name | Protein Target Name | CAS No. | Pack Size |
|-------------|---------------|----------------------------|--------------|-----------|
| AC468081000 | Alectinib | ALK | 1256580-46-7 | 100MG |
| AC467951000 | AZ191 | DYRK1B | 1594092-37-1 | 100MG |
| AC467941000 | Bafetinib | BCR-ABL, LYN | 859212-16-1 | 100MG |
| AC468091000 | Barasertib | AURKB | 722544-51-6 | 100MG |
| AC467961000 | BI-2536 | PLK1, PLK2, PLK3 | 755038-02-9 | 100MG |
| AC467971000 | BIX-02188 | MAP2K5 | 334949-59-6 | 100MG |
| AC468111000 | BLU9931 | FGFR4 | 1538604-68-0 | 100MG |
| AC468251000 | CGI1746 | BTK | 910232-84-7 | 100MG |
| AC468131000 | CHIR-99021 | GSK3A, GSK3B | 252917-06-9 | 100MG |
| AC468181000 | Filgotinib | JAK1 | 1206161-97-8 | 100MG |
| AC468021000 | GNE7915 | LRRK2 | 1351761-44-8 | 100MG |
| AC468191000 | GNF-5 | BCR-ABL | 778277-15-9 | 100MG |
| AC468201000 | GSK481 | RIPK1 | 1622849-58-4 | 100MG |
| AC468211000 | GSK583 | RIPK2 | 1346547-00-9 | 100MG |
| AC468101000 | Infigratinib | FGFR1, FGFR2, FGFR3, FGFR4 | 872511-34-7 | 100MG |
| AC468261000 | P505-15 | SYK | 1370261-96-3 | 100MG |
| AC468271000 | SCH772984 | MAPK1, MAPK3 | 942183-80-4 | 100MG |
| AC468061000 | Spebrutinib | BTK | 1202757-89-8 | 100MG |
| AC467881000 | UNC2025 | MERTK, FLT3 | 1429881-91-3 | 100MG |
| AC467891000 | VE-821 | ATR | 1232410-49-9 | 100MG |

Epigenetics

| Cat No. | Chemical Name | Protein Target Name | CAS No. | Pack Size |
|-------------|----------------------|---------------------|--------------|-----------|
| AC468071000 | A-366 | EHMT2, EHMT1 | 1527503-11-2 | 100MG |
| AC467911000 | ACY-738 | HDAC6 | 1375465-91-0 | 100MG |
| AC467831000 | BIX-01294 | EHMT2 | 935693-62-2 | 100MG |
| AC468141000 | EED226 | EED | 2083627-02-3 | 100MG |
| AC468151000 | EI1 | EZH2 | 1418308-27-6 | 100MG |
| AC468031000 | GSK2801 | BAZ2A, BAZ2B | 1619994-68-1 | 100MG |
| AC468041000 | GSK-5959 | BRPF1 | 901245-65-6 | 100MG |
| AC468001000 | GSK-J4 hydrochloride | KDM6A, KDM6B | 1797983-09-5 | 100MG |
| AC467841000 | I-BET151 | BRD2, BRD3, BRD4 | 1300031-49-5 | 100MG |
| AC468161000 | Pinometostat | DOT1L | 1380288-87-8 | 100MG |
| AC468171000 | Tazemetostat | EZH2 | 1403254-99-8 | 100MG |
| AC468221000 | UNC1999 | EZH1, EZH2 | 1431612-23-5 | 100MG |

Hormone pathway

| Cat No. | Chemical Name | Protein Target Name | CAS No. | Pack Size |
|-------------|----------------------|---------------------|-------------|-----------|
| AC468011000 | GW3965 hydrochloride | LXR-alpha, LXR-beta | 405911-17-3 | 100MG |
| AC467871000 | T0901317 | LXR-alpha, LXR-beta | 293754-55-9 | 100MG |

Lipid kinase

| Cat No. | Chemical Name | Protein Target Name | CAS No. | Pack Size |
|-------------|---------------|---------------------|--------------|-----------|
| AC468121000 | Alpelisib | PIK3CA | 1217486-61-7 | 100MG |
| AC467861000 | Pictilisib | PIK3CA, PIK3CD | 957054-30-7 | 100MG |

Other

| Cat No. | Chemical Name | Protein Target Name | CAS No. | Pack Size |
|-------------|---------------|---------------------|--------------|-----------|
| AC467901000 | A-1210477 | MCL1 | 1668553-26-1 | 100MG |
| AC467921000 | AGI-5198 | IDH1 R132H | 1355326-35-0 | 100MG |
| AC467821000 | AGI-6780 | IDH2 R140Q | 1432660-47-3 | 100MG |
| AC467851000 | JW55 | TNKS, TNKS2 | 664993-53-7 | 100MG |
| AC468231000 | Venetoclax | BCL2 | 1257044-40-8 | 100MG |



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