

Key Takeaway

The [Pharmaceutical KnowledgeBase \(PharmaKB\)](#) content may be used within 3rd party commercial applications. In this case, Reagent Array, a specialty screening sample provider, enables drug sample selection based on key properties from the PharmaKB database.

Reagent Array Drug Sample Selection

Reagent Array subscribes to a custom data feed from CDD's new Pharma KnowledgeBase (PharmaKB) drug profile information on FDA and EMA approved drugs and drugs in clinical trials. Reagent Array employs content from the PharmaKB to allow researchers to select drug ingredient samples.

Reagent Array & PharmaKB Drug Compound Selector

ReagentArray Sample Packaging Format Details				PharmaKB Drug Profile Data							
Product Name	CAS No	MW	FDA STATUS	1st Approved	Approved Indication (MeSH Term)	Target Gene Name	Target Protein Name	US Tradenames	Entity Classif	Next Patent Expi	PharmaKB Rep
Tofacitinib (citrate)	540737-29-9	504.49	APPROVED	11/6/2012	rheumatoid arthritis	JAK3, JAK1, JAK2, PKN1, TYK2	tyrosine-protein kinase JAK3, tyrosine-protein kinase JAK1, tyrosine-protein kinase JAK2, serine/threonine-protein kinase J1, non-receptor tyrosine-protein kinase TYK2	XELJANZ	Small molecule	3/25/2023	https://www.bicreport/TOFACITIB
Leflunomide	75706-12-6	270.21		9/10/1998	rheumatic diseases, rheumatoid arthritis	DHODH	dihydroorotate dehydrogenase (quinone), mitochondrial	ARAVA	Small molecule		https://www.bicreport/LEFLUNOM
Apremilast	608141-41-9	460.50		3/21/2014	psoriatic arthritis	PDE4B, PDE4D, PDE4C, PDE4A	cAMP-specific 3',5'-cyclic phosphodiesterase 4B, cAMP-specific 3',5'-cyclic phosphodiesterase 4D, cAMP-specific 3',5'-cyclic phosphodiesterase 4C, cAMP-specific 3',5'-cyclic phosphodiesterase 4A	OTEZLA	Small molecule	3/19/2023	https://www.bicreport/APREMIL
Auranofin	34031-32-8	678.48			psoriatic arthritis	TRPA1	transient receptor potential cation channel subfamily A member 1	RIDAURA	Small molecule		https://www.bicreport/AURANO

ReagentArray Sample Packaging Format Details				PharmaKB Drug Profile Data			
Product Name	CAS No	MW	FDA STATUS	1st Approved	Approved Indication (MeSH Term)	Target Gene Name	
Tofacitinib	477600-75-2	312.37	APPROVED	11/6/2012	rheumatoid arthritis	JAK3, JAK1, JAK2, PKN1, TYK2	

PharmaKB data fields used for sample selection:

- Common drug name and trade names.
- Biological target and reference codes.
- FDA 1st approval date & current status.
- FDA Approved disease indications.
- Common Industry identifiers.
- Exclusivity impacting patent end dates.
- Entity type (Small molecule, Protein, etc.),

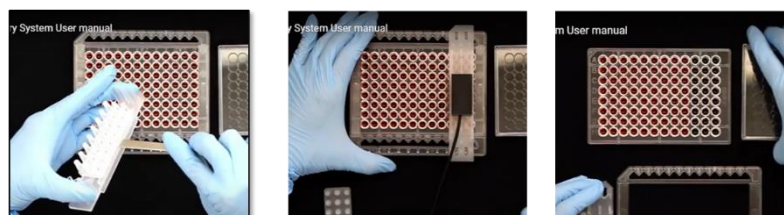
Reagent Array Sample Packaging

Reagent Array samples are delivered in simple single use cassettes holding 24 samples at 0.5 to 2 microliters each. An example sample cassette is illustrated in Figure 2. The sample cassette system provides for delivery of 24 samples to a standard screening place in one simple step.

Figure 2: Sample Cassette



Figure 3: Reagent Array method delivers 24 2 nl samples per cassette in one step (no manual pipetting)



Remove Cover

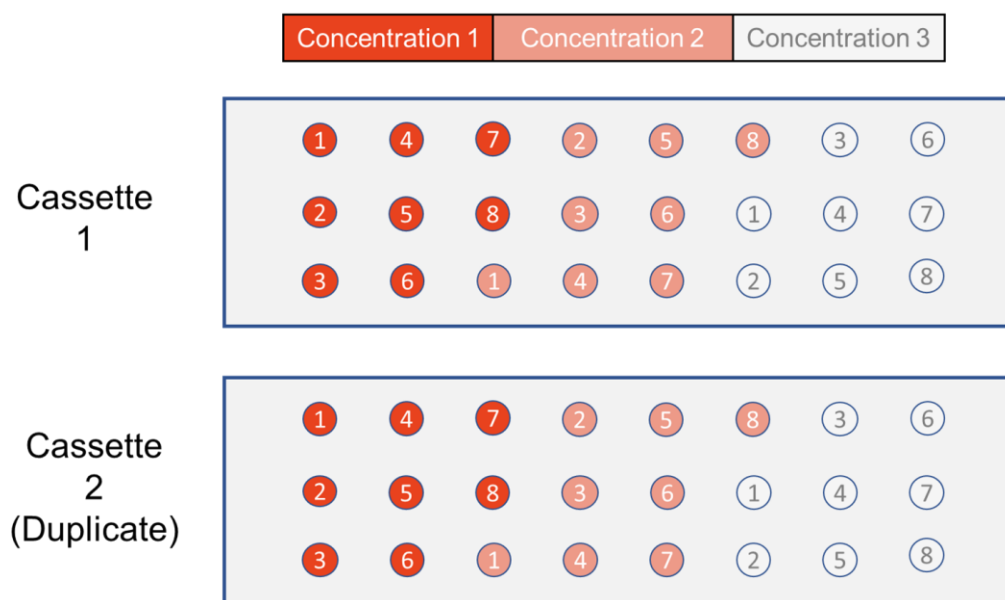
One Step Delivery

Ready To Screen

Standard Reagent Array Sample Formatting

Under Reagent Array standard formatting, each 24 pin cassette contains 8 unique compounds packaged at three different concentrations allowing for easy calculation of dose response curves. Each sample cassette is provided in duplicate so results may be validated.

Standard Packaging for 8 unique samples.



Reagent Array and CDD are working together to provide drug discovery researchers access to user selected custom sets of FDA approved drug ingredients packaged as cost-effective single use laboratory sample sets in screening programs. These custom sets come in a screening-ready format saving both time and money.

For information on Reagent Array products and services:

Please visit: www.ReagentArray.com

Email: info@ReagentArray.com

For information on Collaborative Drug Discovery's Pharma KnowledgeBase (PharmKB):

All content is available through the PharmaKB web application at (www.pharmakb.com) or via the PharmaKB API (details at <https://www.pharmakb.com/api-documentation>).

Email: info@pharmakb.com