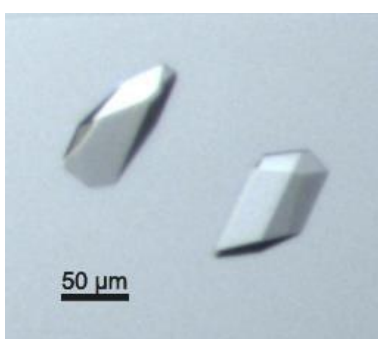




## Cure your screening problems with the drug-like additives in Morpheus III.

Exclusively from Molecular Dimensions, the new Morpheus® III screen uniquely contains a range of small, drug-like compounds to aid protein stabilisation and crystallisation.

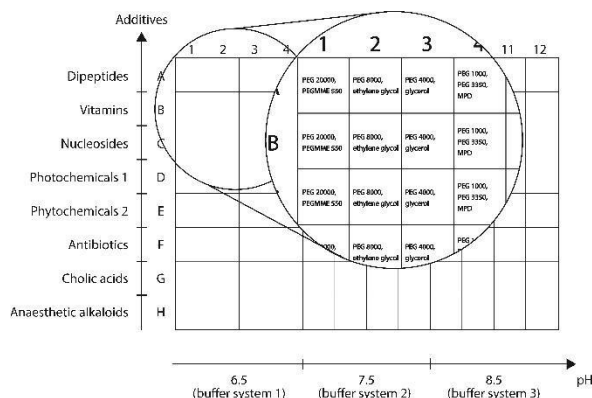


Crystals of human USB 1 (2H phosphoesterase) obtained with Morpheus III. With kind permission of Dr Christine Hilcenko (University of Cambridge, UK).

- Increases the chances of a hit by expanding the amount of chemical space screened with drug-like additives, including phytochemicals, antibiotics, cholic acid derivatives and vitamins.
- Unique to Morpheus III, these compounds aid crystallisation, as they can be protein-stabilising and are often found in structures in the PDB.
- Hits can be easily optimised with the Hippocrates additive screen which contains all 44 drug-like compounds used in Morpheus III.
- Morpheus III is not biased towards particular macromolecules or reagents as it was designed de novo and optimised against a broad range of protein samples.
- Developed by Dr Fabrice Gorrec of the MRC-LMB, Cambridge, UK, the creator of a range of popular and novel screens including Morpheus and the LMB Crystallisation screen, all of which have successfully crystallised a number of challenging targets.



Dr Fabrice Gorrec of MRC-LMB, Cambridge, UK developed the popular Morpheus and Morpheus II screens, which have been proven to be very efficient at crystallising a broad variety of protein samples. Just as with those screens, Morpheus III was designed from scratch and optimised against a broad range of protein samples to avoid bias.



Morpheus III 96-condition screen layout. The systematic, 3D grid screen consists of 8 additive mixes, 4 cryoprotecting precipitant mixes (eg PEG4000 with glycerol) and 3 buffer systems (pH 6.5, 7.5 and 8.5).

### References

Gorrec, F. Acta Cryst F71: 831-837 (2015).  
 Gorrec, F. J. Appl. Cryst. 46: 795-7 (2013).  
 Gorrec, F. J. Appl. Cryst. 42: 1035-42 (2009).

The Morpheus III screen and Hippocrates additive screen were developed at the MRC-LMB, Cambridge, UK and exclusively licensed to Molecular Dimensions by LifeARC.

### ORDERING INFORMATION.

|         | Pack Size   | Description        |
|---------|-------------|--------------------|
| MD1-116 | 96 x 10 mL  | Morpheus III       |
| MD1-117 | 96 x 1 mL   | Morpheus III HT-96 |
| MD1-118 | 48 x 100 µL | Hippocrates        |