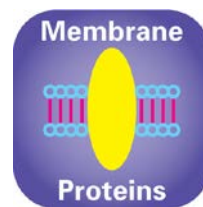
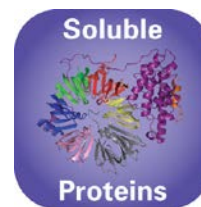


Molecular
Dimensions



Morpheus® II MD1-91

Morpheus II is optimized to yield crystals not observed in traditional screens and also includes heavy atoms for experimental phasing as well as polyols for cryoprotection.

MD1-91 is presented as 96 x 10 mL conditions (includes 12 x 15 mL glass bottles containing polyamine powders¹ to mix with water).

Features of Morpheus II:

- Targeted incorporation of 35 low- molecular weight PDB ligands into 96 conditions.
- Incorporation of heavy atoms as additives for experimental phasing.
- Suitable for membrane proteins with PEGs and polyols as main precipitants.
- The inclusion of NDSBs, polyamines, amino acids and monosaccharides to enhance solubility and stability of many proteins for crystallization.
- New polyols included for cryoprotection of conditions: no need to investigate more conditions for cryo-cooling.
- Innovative buffer systems facilitate pH optimization.
- Readily available Morpheus® II Optimization reagents including the Mixes and Stock reagents.

Introduction

Morpheus II is a follow up to the original screen that was used with success in many laboratories. **Morpheus II** integrates reagents that are not seen in other screens, especially less common additives. As a consequence, the screen should have an impact not only on crystallisation but also on the overall structure determination process.

Morpheus II follows the general design principles of the original Morpheus screen. However, less typical additives have been included, such as heavy metals, NDSBs, polyamines, amino acids and monosaccharides. In addition, various polyols have been added for cryoprotection along with innovative buffer systems.

Some additives such as metal divalent cations can induce new crystal contacts. Also, heavy atoms were integrated to help with *ab initio* structure determination since a common issue to solve novel structure is the phase problem.

Most of the other additives are meant to alter protein stability and solubility (carboxylic acids, polyamines and monosaccharides).

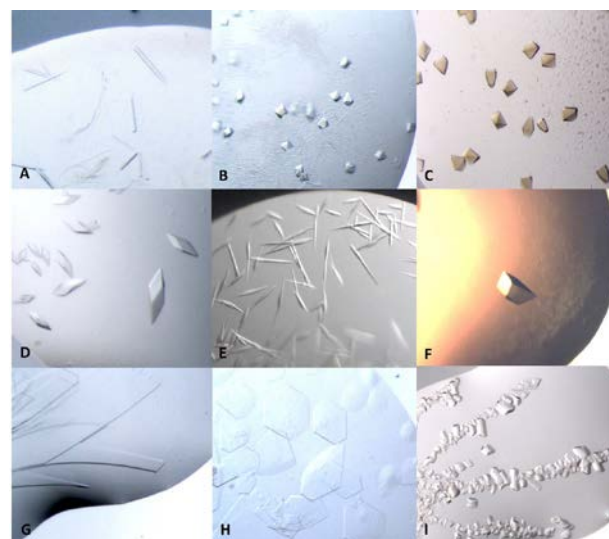
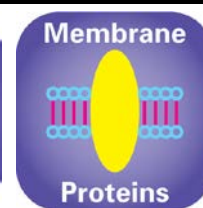
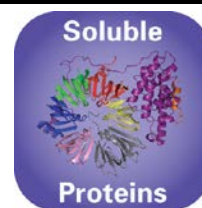
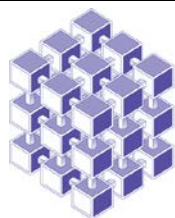


Figure 1

Figure 1. Examples of crystals obtained during initial tests with the final formulation of Morpheus II. **A. B.** Concanavalin-A (MW = 27 kDa). **C.** Catalase (63 kDa). **D.** BAR domain (29 kDa). **E.** Trans-membrane complex (540 kDa). **F.** Actin homologue (37 kDa). **G.** Domain of a cytosolic nucleic acid sensor (12 kDa). **H.** Virus capsid (25 kDa). **I.** Polymerase complex (80 kDa).

¹ The mix of polyamines must be prepared and added to the 12 corresponding tubes by the user, hence only the raw chemicals are present in the screen kit (powder mix is given in a 15 ml glass bottle in order to prepare 13 ml using ultrapure water).



Screen Design

Morpheus II is based on the 3D grid design of Morpheus. The 35 PDB-derived ligands selected to formulate Morpheus2 are shown in Table 1. From these, eight additive mixes were prepared (Table 2): LiNaK, Divalents II, Alkalis, Oxometaltes, Lanthanides, Monosaccharides II, Amino acids II and Polyamines.

Formulation Notes:

Morpheus II reagents are formulated using ultrapure water (>18.0 MΩ) and are sterile-filtered using 0.22 μm filters. No preservatives are added.

Final pH may vary from that specified on the datasheet. Molecular Dimensions will be happy to discuss the precise formulation of individual reagents.

Individual reagents and stock solutions for optimization are available from Molecular Dimensions.

Contact and product details can be found at www.moleculardimensions.com

Enquiries regarding Morpheus II formulation, interpretation of results or optimization strategies are welcome. Please e-mail, fax or phone your query to Molecular Dimensions.

References

1. Gorrec, F (2009), The MORPHEUS protein crystallization screen *J Appl Cryst* **42**, 1035-1042
2. Gorrec, F (2013), The current approach to initial crystallization screening of proteins is under-sampled *J Appl Cryst* **46**, 795-797.
3. Gorrec, F (2015), The Morpheus II protein crystallization screen, ICCBM15 proceedings (Special Issue ActaF).

Morpheus II Optimization

There are two main things to consider in first instance optimizing hits with Morpheus and Morpheus II:

Although the screen is composed of various mixes, consider a condition like in any other screen, with three stock solutions:

- mix of precipitants
- mix of additives
- mix of buffers.

When you have more than one hit, you can deduce the importance of each stock right from the beginning: e.g. Do I see specificity related to one stock? To pH?

Every condition can be made following the same ratio of stock solutions:

$1/2$ [Precipitant mix] + $1/10$ [additive mix] + $1/10$ [Buffer system] + $3/10$ dH₂O.

You can make optimization 2D grid screens, by varying the stock concentrations.

To vary the pH, you can change the ratio of the two buffers within the buffer stock (i.e. change ratio of two non-titrated 1M buffer stocks).

Once you know more about the chemical space within Morpheus II you can eventually investigate further, trying to reveal specificity of a single chemical.

For example, what happens when you replace the group of chemicals from a stock with only one chemical of this mix? (e.g. only one divalent cations instead of the corresponding mix of additives).

At this stage you may (or not) have a simpler condition to work with. You can also proceed to other "classic" optimization approaches such as using an additive screen, scale-up or seeding.

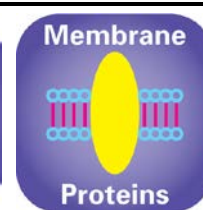
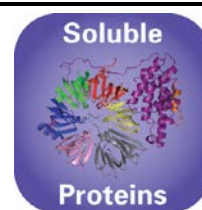
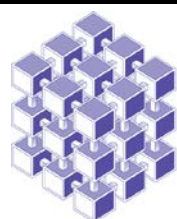


Table 1: List of PDB ligands in Morpheus II
(No. of Structures requested in December 2014)

PDB ligand name	Class	PDB ID (main)	No. of structures
Lithium sulfate	Common salt	LI	51
Sodium Chloride	Common salt	Na	4726
Potassium sulfate	Common salt	K	1638
Manganese chloride tetrahydrate	Divalent cation	MN	1938
Cobalt chloride hexahydrate	Divalent cation	CO	474
Nickel chloride hexahydrate	Divalent cation	NI	699
Zinc acetate dihydrate	Divalent cation	ZN	8413
Barium acetate	Alkali	BA	91
Cesium acetate	Alkali	CS	75
Rubidium chloride	Alkali	RB	34
Strontium acetate	Alkali	SR	101
Sodium chromate tetrahydrate	Oxometalate	CR	7
Sodium molybdate dihydrate	Oxometalate	MOO	20
sodium orthovanadate	Oxometalate	VO4	73
Sodium tungstate dihydrate	Oxometalate	WO4	47
Erbium(III) Chloride hexahydrate	Lanthanide	ER3	2
Terbium(III) Chloride hexahydrate	Lanthanide	TB	11
Ytterbium (III) Chloride hexahydrate	Lanthanide	YB	57
Yttrium (III) Chloride hexahydrate	Lanthanide	YT3	33
Xylitol	Monosaccharide	XYL	25
D-(-)-Fructose	Monosaccharide	FRU; FUD	36; 4
D-Sorbitol	Monosaccharide	SOR	12
myo-Inositol	Monosaccharide	INS	16
L-Rhamnose monohydrate	Monosaccharide	RAM	43
DL-Threonine	Amino-acid	DTH; THR	23; n/a
DL-Histidine, HCL, H2O	Amino-acid	DHI; HIS	24; n/a
DL-5-Hydroxylysine, HCl	Amino-acid	n/a; LYZ	0; 7
trans-4-Hydroxy-L-proline	Amino-acid	HYP	149
Spermine, 4 HCl	Polyamine	SPM	103
spermidine, 3HCl	Polyamine	SPD	32
1,4-Diaminobutane, 2HCl	Polyamine	PUT	22
DL-Ornithine, HCl	Polyamine	ORD; ORN	3; 56
NDSB 256	Surfactant	DMX	4
NDSB 195	Surfactant	NDS	7
Bis-tris	buffer	BTB	114

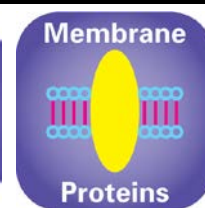
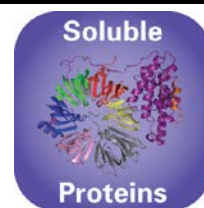
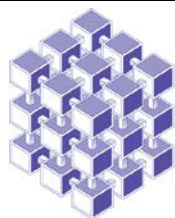


Table 2: Mixes of additives used in Morpheus II

Mix name	Composition	Catalogue Number (100 ml)	Catalogue Number (250 ml)
0.9 M LiNaK	0.3 M Lithium sulfate, 0.3 M Sodium sulfate, 0.3 M Potassium sulfate	MD2-100-231	MD2-250-231
0.02M Divalents II	0.005M Manganese(II) chloride tetrahydrate, 0.005M Cobalt(II) chloride hexahydrate, 0.005M Nickel(II) chloride hexahydrate, 0.005M Zinc acetate dihydrate	MD2-100-232	MD2-250-232
0.04 M Alkalis	0.01M Rubidium chloride, 0.01M Strontium acetate, 0.01M Cesium acetate, 0.01M Barium acetate	MD2-100-233	MD2-250-233
0.02 M Oxometalates	0.005M Sodium chromate tetrahydrate, 0.005M Sodium molybdate dihydrate, 0.005M Sodium tungstate dihydrate, 0.005M Sodium orthovanadate	MD2-100-234	MD2-250-234
0.02M Lanthanides	0.005M Yttrium(III) chloride hexahydrate, 0.005M Erbium(III) chloride hexahydrate, 0.005M Terbium(III) chloride hexahydrate, 0.005M Ytterbium(III) chloride hexahydrate	MD2-100-235	MD2-250-235
1M Monosaccharides II	0.2M Xylitol, 0.2M Myo-Inositol, 0.2M D-(-)-Fructose, 0.2M L-Rhamnose monohydrate, 0.2M D-Sorbitol	MD2-100-236	MD2-250-236
1M Amino acids II	0.2M DL-Arginine hydrochloride, 0.2M DL-Threonine, 0.2M DL-Histidine monohydrochloride monohydrate, 0.2M DL-5-Hydroxylysine hydrochloride, 0.2M <i>trans</i> -4-hydroxy-L-proline	MD2-100-237	MD2-250-237
0.4 M Polyamines (provided as powder for 10mL kits)	0.1M Spermine tetrahydrochloride, 0.1M Spermidine trihydrochloride, 0.1M 1,4-Diaminobutane dihydrochloride, 0.1M DL-Ornithine monohydrochloride	MD2-100-238	MD2-250-238

Table 3: Buffer systems* used in Morpheus II

Mix name	Conc.	pH @ 20°C	Composition	Catalogue Number (100 ml)	Catalogue Number (250 ml)
Buffer System 4	1.0M	6.5	MOPSO, Bis-Tris	MD2-100-243	MD2-250-243
Buffer System 5	1.0M	7.5	BES, Triethylamine (TEA)	MD2-100-244	MD2-250-244
Buffer System 6	1.0M	8.5	Gly-Gly, AMPD	MD2-100-245	MD2-250-245

*Buffer systems 1, 2 & 3 are allocated to the original Morpheus screen.

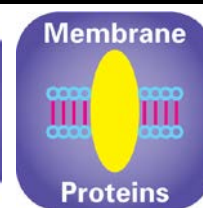
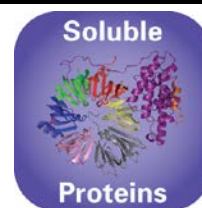
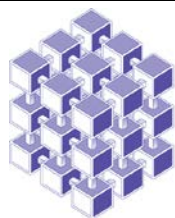


Table 4: Mixes of Precipitants* used in Morpheus II

Mix name	Composition	Catalogue Number (100 ml)	Catalogue Number (250 ml)
Precipitant Mix 5	30% w/v PEG 3000, 40% v/v 1, 2, 4-Butanetriol, 2% w/v NDSB 256	MD2-100-239	MD2-250-239
Precipitant Mix 6	25% w/v PEG 4000, 40% w/v 1,2,6-Hexanetriol	MD2-100-240	MD2-250-240
Precipitant Mix 7	20% w/v PEG 8000, 40% v/v 1,5-Pentenediol	MD2-100-241	MD2-250-241
Precipitant Mix 8	10% w/v PEG 20000, 50% w/v Trimethylpropane, 2% w/v NDSB 195	MD2-100-242	MD2-250-242

*precipitant Mixes 1, 2, 3 & 4 are allocated to the original Morpheus screen.

Note: Following the universal ratio of stock solutions employed to formulate each condition of Morpheus screens (p.4 & 5), the concentration of precipitant in the final formulation (p.7-8) can be described as 50% v/v.

Notes:

The mix of polyamines must be prepared and added to the 12 corresponding tubes by the user, hence only the raw chemicals are present in the screen kit (powder mix in a 15 mL glass bottle in order to prepare 13 mL).

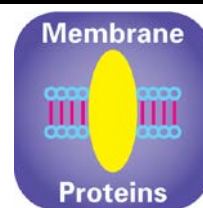
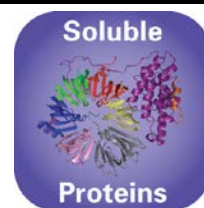
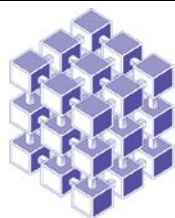
The screen should preferably be kept between 10-18 °C.

Gently mix the screen before use.

A light pellet may form in tubes containing Lanthanides (2-1 to 2-12). It is easily re-suspended with gentle mixing.

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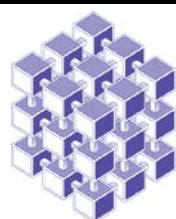


Morpheus II

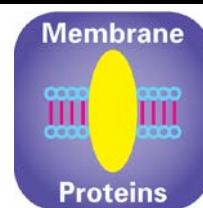
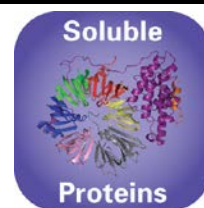
Conditions 1-48 (Box 1)

MD1-91

Screen ID	Conc.	Additives (PDB ligands)	Conc.	Buffer	pH	Conc.	Precipitant
1-1	90 mM	LiNaK	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 5
1-2	90 mM	LiNaK	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 6
1-3	90 mM	LiNaK	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 7
1-4	90 mM	LiNaK	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 8
1-5	90 mM	LiNaK	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 5
1-6	90 mM	LiNaK	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 6
1-7	90 mM	LiNaK	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 7
1-8	90 mM	LiNaK	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 8
1-9	90 mM	LiNaK	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 5
1-10	90 mM	LiNaK	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 6
1-11	90 mM	LiNaK	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 7
1-12	90 mM	LiNaK	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 8
1-13	2 mM	Divalents II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 5
1-14	2 mM	Divalents II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 6
1-15	2 mM	Divalents II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 7
1-16	2 mM	Divalents II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 8
1-17	2 mM	Divalents II		none		50 % v/v	Precipitant Mix 5
1-18	2 mM	Divalents II		none		50 % v/v	Precipitant Mix 6
1-19	2 mM	Divalents II		none		50 % v/v	Precipitant Mix 7
1-20	2 mM	Divalents II		none		50 % v/v	Precipitant Mix 8
1-21	2 mM	Divalents II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 5
1-22	2 mM	Divalents II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 6
1-23	2 mM	Divalents II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 7
1-24	2 mM	Divalents II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 8
1-25	4 mM	Alkalis	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 5
1-26	4 mM	Alkalis	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 6
1-27	4 mM	Alkalis	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 7
1-28	4 mM	Alkalis	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 8
1-29	4 mM	Alkalis	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 5
1-30	4 mM	Alkalis	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 6
1-31	4 mM	Alkalis	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 7
1-32	4 mM	Alkalis	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 8
1-33	4 mM	Alkalis	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 5
1-34	4 mM	Alkalis	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 6
1-35	4 mM	Alkalis	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 7
1-36	4 mM	Alkalis	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 8
1-37	2 mM	Oxometalates	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 5
1-38	2 mM	Oxometalates	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 6
1-39	2 mM	Oxometalates	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 7
1-40	2 mM	Oxometalates	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 8
1-41	2 mM	Oxometalates	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 5
1-42	2 mM	Oxometalates	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 6
1-43	2 mM	Oxometalates	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 7
1-44	2 mM	Oxometalates	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 8
1-45	2 mM	Oxometalates	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 5
1-46	2 mM	Oxometalates	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 6
1-47	2 mM	Oxometalates	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 7
1-48	2 mM	Oxometalates	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 8



Molecular
Dimensions

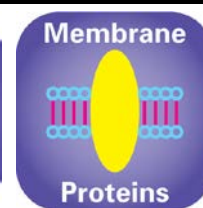
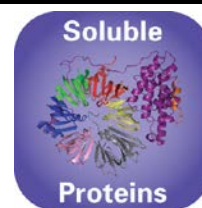
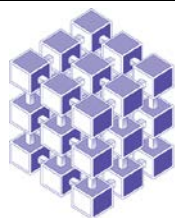


Morpheus II

Conditions 1-48 (Box 2)

MD1-91

Screen ID	Conc.	Additives (PDB ligands)	Conc.	Buffer	pH	Conc.	Precipitant
2-1	2 mM	Lanthanides	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 5
2-2	2 mM	Lanthanides	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 6
2-3	2 mM	Lanthanides	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 7
2-4	2 mM	Lanthanides	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 8
2-5	2 mM	Lanthanides	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 5
2-6	2 mM	Lanthanides	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 6
2-7	2 mM	Lanthanides	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 7
2-8	2 mM	Lanthanides	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 8
2-9	2 mM	Lanthanides	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 5
2-10	2 mM	Lanthanides	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 6
2-11	2 mM	Lanthanides	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 7
2-12	2 mM	Lanthanides	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 8
2-13	100 mM	Monosaccharides II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 5
2-14	100 mM	Monosaccharides II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 6
2-15	100 mM	Monosaccharides II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 7
2-16	100 mM	Monosaccharides II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 8
2-17	100 mM	Monosaccharides II	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 5
2-18	100 mM	Monosaccharides II	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 6
2-19	100 mM	Monosaccharides II	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 7
2-20	100 mM	Monosaccharides II	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 8
2-21	100 mM	Monosaccharides II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 5
2-22	100 mM	Monosaccharides II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 6
2-23	100 mM	Monosaccharides II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 7
2-24	100 mM	Monosaccharides II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 8
2-25	100 mM	Amino acids II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 5
2-26	100 mM	Amino acids II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 6
2-27	100 mM	Amino acids II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 7
2-28	100 mM	Amino acids II	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 8
2-29	100 mM	Amino acids II	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 5
2-30	100 mM	Amino acids II	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 6
2-31	100 mM	Amino acids II	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 7
2-32	100 mM	Amino acids II	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 8
2-33	100 mM	Amino acids II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 5
2-34	100 mM	Amino acids II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 6
2-35	100 mM	Amino acids II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 7
2-36	100 mM	Amino acids II	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 8
2-37	40 mM	Polyamines	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 5
2-38	40 mM	Polyamines	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 6
2-39	40 mM	Polyamines	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 7
2-40	40 mM	Polyamines	0.1 M	Buffer System 4	6.5	50 % v/v	Precipitant Mix 8
2-41	40 mM	Polyamines	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 5
2-42	40 mM	Polyamines	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 6
2-43	40 mM	Polyamines	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 7
2-44	40 mM	Polyamines	0.1 M	Buffer System 5	7.5	50 % v/v	Precipitant Mix 8
2-45	40 mM	Polyamines	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 5
2-46	40 mM	Polyamines	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 6
2-47	40 mM	Polyamines	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 7
2-48	40 mM	Polyamines	0.1 M	Buffer System 6	8.5	50 % v/v	Precipitant Mix 8



Manufacturer's safety data sheets are available from our website.

Re-Ordering details:

Catalogue Description	Pack size	Catalogue Code
Morpheus® II	96 x 10 mL	MD1-91
Morpheus® II HT-96	96 x 1 mL	MD1-92
Morpheus® II FX-96	96 x 100 µL	MD1-92-FX
The Morpheus® Additive Screen	96 x 100 µL	MD1-93
Morpheus®	96 x 10 mL	MD1-46
Morpheus® HT-96	96 x 1 mL	MD1-47
Morpheus® FX-96	96 x 100 µL	MD1-47-FX
Morpheus® OptiMax Kit*	43 x 10 mL	MD1-58
Green Screens (contain fluorescent green dye - ideal for UV)		
Morpheus® Green Screen	96 x 10 mL	MD1-46-GREEN
Morpheus® HT-96 Green Screen	96 x 1 mL	MD1-47-GREEN
Combo Packs		
Power Combo Value Pack (Morpheus® + MIDAS™)	2 x 96 x 10 mL	MD1-76
Power Combo Value Pack HT-96 (Morpheus® + MIDAS™)	2 x 96 x 1 mL	MD1-76-HT
Single Reagents		
Morpheus® single reagents	100 mL	MDSR-46-tube number
Morpheus® HT-96 single reagents	100 mL	MDSR-47-well number
Morpheus® II single reagents	100 mL	MDSR-91-tube number
Morpheus® II HT-96 single reagents	100 mL	MDSR-92-well number

All Morpheus and Morpheus II Mixes are available to buy from moleculardimensions.com

*Morpheus® OptiMax Kit contains all the individual stock reagents for Morpheus