

## MultiXtal MD1-65

A great addition to any crystallization lab - a 48 condition sparse matrix Hi-PEG crystallization screen offering multiple uses for crystallization. For soluble and membrane proteins.

MD1- 65 is presented 48 x 10 mL conditions.

### Features of MultiXtal:

- High PEG concentration screen.
- Suitable for soluble and membrane proteins.
- Ideal for counter-diffusion experiments-compatible with CrystalHarp™.
- Use in seeding experiments.
- Available as 10 mL, HT or prefilled microplate (FX) format.

### Introduction

MultiXtal is designed as a high PEG concentration screen for vapour diffusion as well as for use in counter-diffusion experiments and seeding experiments. Contains higher PEG concentrations than found in traditional standard screens; offering greater flexibility in its usage. A buffering range from pH 5.5 to 8.5 ensures appropriate buffering when setting-up crystallizations from 4°C to 37°C.

### MultiXtal Formulation

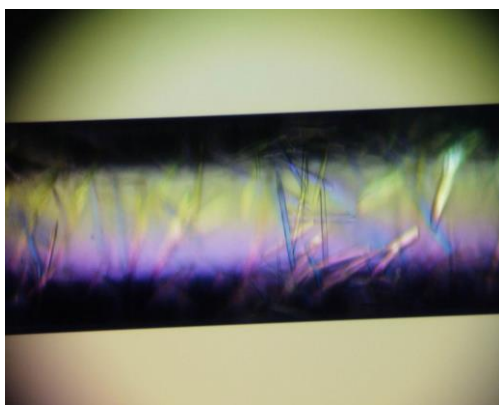
MultiXtal reagents are formulated using ultrapure water (>18.0 MΩ) and are sterile-filtered using 0.22 µm filters. No preservatives are added.

Sodium phosphate used in this screen is Sodium Phosphate dibasic dihydrate, titrated with HCl.

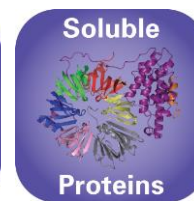
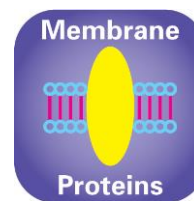
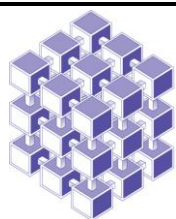
Final pH may vary from that specified on the datasheet. Molecular Dimensions will be happy to discuss the precise formulation of individual reagents. Individual reagents and stock solutions for optimization are available from Molecular Dimensions.

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

Contact and product details can be found at [www.moleculardimensions.com](http://www.moleculardimensions.com)



Crystals growing inside a capillary.

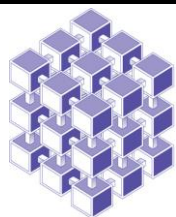


**MultiXtal**

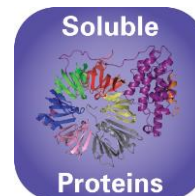
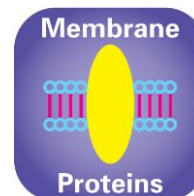
**Tubes 1-48**

**MD1-65**

Tube #	Conc	Salt	Conc	Buffer	pH	Conc	Precipitant 1	Conc	Precipitant 2
1	0.5 M	Sodium chloride	0.1 M	Tris	8.5	30 % v/v	PEG 400		
2	0.2 M	Lithium sulfate	0.1 M	Tris	8.5	10 % w/v	PEG 1000	10 % w/v	PEG 8000
3	0.2 M	Magnesium chloride hexahydrate	0.1 M	Sodium HEPES	7.5	10 % w/v	PEG 1000	10 % w/v	PEG 8000
4	1.2 M	Ammonium acetate	0.1 M	Sodium HEPES	7.5	25 % w/v	PEG 3350		
5	0.2 M	Lithium sulfate	0.1 M	Sodium acetate	5.5	10 % w/v	PEG 1000	10 % w/v	PEG 8000
6	0.2 M	Magnesium chloride hexahydrate	0.1 M	Sodium acetate	5.5	10 % w/v	PEG 1000	10 % w/v	PEG 8000
7	0.2 M	Magnesium chloride hexahydrate	0.1 M	Tris	8.5	10 % w/v	PEG 1000	10 % w/v	PEG 8000
8	0.2 M	Sodium citrate tribasic dihydrate	0.1 M	Tris	8.5	30 % v/v	PEG 400		
9	0.2 M	Calcium chloride dihydrate	0.1 M	HEPES	7.5	50 % v/v	PEG 400		
10	0.5 M	Sodium chloride	0.1 M	Sodium HEPES	7.5	25 % w/v	PEG 4000		
11	0.2 M	Potassium thiocyanate	0.1 M	Sodium acetate	5.5	10 % w/v	PEG 1000	10 % w/v	PEG 8000
12	1.2 M	Ammonium acetate	0.1 M	Bis-Tris	5.5	25 % w/v	PEG 3350		
13	0.2 M	Magnesium chloride hexahydrate	0.1 M	Tris	8.5	25 % w/v	PEG 4000		
14	0.2 M	Magnesium chloride hexahydrate	0.1 M	Tris	8.5	30 % w/v	PEG 8000		
15	0.5 M	Sodium chloride	0.1 M	Sodium phosphate	7.0	30 % v/v	PEG 300		
16	0.5 M	Sodium chloride	0.1 M	MOPS	7.0	30 % v/v	PEG 400		
17	0.2 M	Lithium sulfate	0.1 M	Bis-Tris	5.5	25 % w/v	PEG 3350		
18	0.2 M	Magnesium chloride hexahydrate	0.1 M	Bis-Tris	5.5	25 % w/v	PEG 3350		
19	0.5 M	Sodium chloride	0.1 M	Tris	8.5	10 % w/v	PEG 1000	10 % w/v	PEG 8000
20	0.5 M	Sodium chloride	0.1 M	EPPS	8.0	33 % w/v	PEG 1500		
21	0.2 M	Magnesium chloride hexahydrate	0.1 M	Sodium HEPES	7.0	15 % w/v	PEG 4000		
22	0.2 M	Calcium chloride dihydrate	0.1 M	HEPES	7.0	30 % v/v	PEG 400		
23	0.2 M	Magnesium chloride hexahydrate	0.1 M	Sodium citrate	5.0	15 % w/v	PEG 4000		
24	1.2 M	Ammonium acetate	0.1 M	Sodium acetate	5.0	20 % w/v	PEG 4000		
25	0.2 M	Calcium chloride dihydrate	0.1 M	Tris	8.0	45 % v/v	PEG 400		
26	0.2 M	Lithium chloride	0.1 M	Tris	8.0	20 % w/v	PEG 8000		
27	0.5 M	Sodium chloride	0.1 M	HEPES	7.0	22 % v/v	PEG 500 MME		
28	0.5 M	Sodium chloride	0.1 M	MES	6.5	30 % v/v	PEG 400		
29	0.2 M	Magnesium chloride hexahydrate	0.1 M	MES	6.0	25 % w/v	PEG 3350		
30	0.2 M	Magnesium chloride hexahydrate	0.1 M	MES	6.0	20 % w/v	PEG 6000		
31	0.2 M	Magnesium chloride hexahydrate	0.1 M	Tris	8.0	25 % w/v	PEG 8000		
32	0.6 M	Ammonium sulfate	0.1 M	Tris	7.5	20 % v/v	PEG 400		
33	0.2 M	Calcium chloride dihydrate	0.1 M	MES	6.5	25 % v/v	PEG 350 MME		
34	0.2 M	Calcium chloride dihydrate	0.1 M	MES	6.5	30 % v/v	PEG 400		
35	0.2 M	Calcium chloride dihydrate	0.1 M	MES	6.0	20 % w/v	PEG 6000		
36	0.5 M	Sodium chloride	0.1 M	MES	6.0	20 % w/v	PEG 6000		
37	0.2 M	Magnesium chloride hexahydrate	0.1 M	Sodium HEPES	7.5	30 % v/v	PEG 400		
38	0.2 M	Lithium sulfate	0.1 M	Tris	7.5	10 % w/v	PEG 1000	10 % w/v	PEG 8000
39	0.2 M	Magnesium chloride hexahydrate	0.1 M	MES	6.5	25 % w/v	PEG 4000		
40	0.6 M	Ammonium sulfate	0.1 M	MES	6.5	10 % w/v	PEG 8000		
41	1.2 M	Ammonium chloride	0.1 M	MES	6.0	20 % w/v	PEG 6000		
42	0.2 M	Lithium chloride	0.1 M	MES	6.0	20 % w/v	PEG 6000		
43	0.2 M	Magnesium chloride hexahydrate	0.1 M	Tris	7.5	10 % w/v	PEG 1000	10 % w/v	PEG 8000
44	0.2 M	Potassium thiocyanate	0.1 M	Tris	7.5	10 % w/v	PEG 1000	10 % w/v	PEG 8000
45	0.2 M	Lithium sulfate	0.1 M	ADA	6.5	30 % v/v	PEG 400		
46	0.5 M	Sodium chloride	0.1 M	Sodium citrate	5.5	30 % v/v	PEG 400		
47	0.6 M	Ammonium sulfate	0.1 M	Sodium HEPES	7.5	15 % v/v	PEG 400		
48	1.2 M	Ammonium acetate	0.1 M	Tris	8.5	15 % w/v	PEG 4000		



Molecular  
Dimensions



**Abbreviations:**

**ADA:** N-(2-Acetamido)iminodiacetic Acid, **Bis-tris:** Bis-(2-hydroxyethyl)imino-tris(hydroxymethyl)methane, **HEPES:** 2-(4-(2-Hydroxyethyl)-1-piperazinyl)ethanesulfonic Acid, **Sodium HEPES:** 2-(4-(2-Hydroxyethyl)-1-piperazinyl)ethanesulfonic Acid Sodium Salt, **MES:** 2-(N-morpholino)ethanesulfonic acid, **MOPS:** 3-[N-morpholino] propanesulfonic acid, **EPPS:** 4-(2-hydroxyethyl)piperazine-1-propanesulfonic acid, **MPD:** 2-methyl, 2,4-pentanediol, **PEG:** Poly Ethylene Glycol, **Tris:** 2-Amino-2-(hydroxymethyl)propane-1,3-diol,

Manufacturer's safety data sheets are available from our website or by scanning the QR code here:



**Re-Ordering details:**

**Catalogue Description**

MultiXtal  
MultiXtal HT-96  
MultiXtal FX-96 pre-filled

48 x 10 mL  
2 x (48 x 1 mL)  
2 x (48 x 100 µL)

**Catalogue Code**

MD1-65  
MD1-66  
MD1-67

**Single Reagents**

MultiXtal single reagents  
MultiXtal HT-96 single reagents

100 mL  
100 mL

MDSR-65-tube number  
MDSR-66-tube number

For MultiXtal stock reagents visit our Optimization page on our website.