

## Scoring Sheet — The JCSG Core IV Suite

|           |            |                |         |
|-----------|------------|----------------|---------|
| Date:     | Protein:   | Protein vol.:  | $\mu$ l |
| Operator: | Buffer:    | Solution vol.: | $\mu$ l |
| Plate ID: | Additives: | Additive vol.: | $\mu$ l |

Date of observation

| Location | Crystallization condition |  |  |  |  |  |
|----------|---------------------------|--|--|--|--|--|
| A1       | 1,A1                      | 0.2 M Lithium sulfate, 0.1 M CAPS pH 10.5, 2.0 M Ammonium sulfate  |  |  |  |  |
| A2       | 1,A2                      | 0.2 M Lithium sulfate, 0.1 M Glycine pH 10.5, 1.2 M Sodium dihydrogen phosphate/ 0.8 M di-Potassium hydrogen phosphate |  |  |  |  |
| A3       | 1,A3                      | 0.1M CAPS pH 10.5, 40% (v/v) MPD   |  |  |  |  |
| A4       | 1,A4                      | 0.1 M CHES pH 9.5, 10% (w/v) PEG 3000  |  |  |  |  |
| A5       | 1,A5                      | 0.2 M Lithium sulfate, 0.1 M CHES pH 9.5, 1.0 M Sodium/Potassium tartrate  |  |  |  |  |
| A6       | 1,A6                      | 0.1 M CHES pH 9.5, 30% (v/v) PEG 400   |  |  |  |  |
| A7       | 1,B1                      | 0.1 M CHES pH 9.5, 15% (v/v) Ethanol   |  |  |  |  |
| A8       | 1,B2                      | 0.2 M Sodium citrate, 0.1M CHES pH 9.5, 40% (v/v) PEG 300  |  |  |  |  |
| A9       | 1,B3                      | 0.1M CHES pH 9.5, 40% (v/v) MPD  |  |  |  |  |
| A10      | 1,B4                      | 0.1 M Bicine pH 9.0, 1.6 M Ammonium sulfate  |  |  |  |  |
| A11      | 1,B5                      | 0.1 M Bicine pH 9.0, 0.8 M Ammonium sulfate  |  |  |  |  |
| A12      | 1,B6                      | 0.1 M Bicine pH 9.0, 2.4 M Ammonium sulfate  |  |  |  |  |
| B1       | 1,C1                      | 0.1 M Bicine pH 8.5, 10% (w/v) PEG 6000  |  |  |  |  |
| B2       | 1,C2                      | 0.1 M Bicine pH 9.0, 2.4 M Ammonium sulfate  |  |  |  |  |
| B3       | 1,C3                      | 0.1 M Bicine pH 8.5, 30% (w/v) PEG 6000  |  |  |  |  |
| B4       | 1,C4                      | 0.1 M Bicine pH 8.5, 65% (v/v) MPD   |  |  |  |  |
| B5       | 1,C5                      | 0.1 M Bicine pH 9.0, 2.0 M Magnesium chloride  |  |  |  |  |
| B6       | 1,C6                      | 0.1 M Tris pH 8.5, 10% (v/v) Isopropanol   |  |  |  |  |
| B7       | 1,D1                      | 0.2 M Magnesium chloride, 0.1M Tris pH 8.5, 50% (v/v) Ethylene glycol  |  |  |  |  |
| B8       | 1,D2                      | 0.2 M Magnesium chloride, 0.1M Tris pH 8.5, 25% (v/v) 1,2-Propanediol, 10% (v/v) Glycerol                              |  |  |  |  |
| B9       | 1,D3                      | 0.2 M Magnesium chloride, 0.1 M Tris-HCl pH 8.5, 30% (w/v) PEG 4000  |  |  |  |  |
| B10      | 1,D4                      | 0.2 M Sodium citrate, 0.1 M Tris-HCl pH 8.5, 30% (v/v) PEG 400   |  |  |  |  |
| B11      | 1,D5                      | 0.2 M Lithium sulfate, 0.1 M Tris-HCl pH 8.5, 30% (w/v) PEG 4000   |  |  |  |  |
| B12      | 1,D6                      | 0.2 M Ammonium acetate, 0.1 M Tris-HCl pH 8.5, 30% (v/v) Isopropanol   |  |  |  |  |
| C1       | 2,A1                      | 0.1 M Tris pH 8.5, 1.5 M Ammonium sulfate, 12% (v/v) Glycerol  |  |  |  |  |
| C2       | 2,A2                      | 0.18 M Sodium citrate, 0.09 M Tris-HCl pH 8.5, 27% (v/v) PEG 400, 10% (v/v) Glycerol                                   |  |  |  |  |
| C3       | 2,A3                      | 0.17 M Sodium acetate, 0.085 M Tris-HCl pH 8.5, 25.5% (w/v) PEG 4000, 15% (v/v) Glycerol                               |  |  |  |  |
| C4       | 2,A4                      | 0.1 M Imidazole pH 8.0, 10% (v/v) Isopropanol  |  |  |  |  |
| C5       | 2,A5                      | 0.2 M Zinc acetate, 0.1 M Imidazole pH 8.0, 2.5 M Sodium chloride  |  |  |  |  |
| C6       | 2,A6                      | 0.1 M Imidazole pH 8.0, 2.5 M Sodium chloride  |  |  |  |  |
| C7       | 2,B1                      | 0.1 M Imidazole pH 8.0, 10% (w/v) PEG 8000   |  |  |  |  |
| C8       | 2,B2                      | 0.2 M Sodium chloride, 0.1 M Imidazole pH 8.0, 1.0 M di-Ammonium phosphate   |  |  |  |  |
| C9       | 2,B3                      | 0.1 M Tris pH 8.5, 1.6 M Ammonium sulfate  |  |  |  |  |
| C10      | 2,B4                      | 0.1 M Tris pH 8.5, 5% (w/v) PEG 6000   |  |  |  |  |
| C11      | 2,B5                      | 0.1 M Tris pH 8.5, 65% (v/v) MPD   |  |  |  |  |
| C12      | 2,B6                      | 1.0 M Lithium chloride, 0.1 M Tris pH 8.5, 10% (w/v) PEG 6000  |  |  |  |  |
| D1       | 2,C1                      | 0.1 M Tris pH 8.0, 3.2 M Ammonium sulfate  |  |  |  |  |
| D2       | 2,C2                      | 0.1 M HEPES pH 7.5, 1.26 M Ammonium sulfate  |  |  |  |  |
| D3       | 2,C3                      | 0.2 M Sodium chloride, 0.1 M HEPES pH 7.5, 35% (v/v) MPD   |  |  |  |  |
| D4       | 2,C4                      | 0.1M HEPES pH 7.5, 50% (v/v) PEG 200   |  |  |  |  |
| D5       | 2,C5                      | 0.1 M HEPES pH 7.5, 1.5 M Lithium sulfate  |  |  |  |  |
| D6       | 2,C6                      | 0.1 M HEPES pH 7.5, 4.3 M Sodium chloride  |  |  |  |  |
| D7       | 2,D1                      | 0.2 M Sodium citrate, 0.1 M HEPES pH 7.5, 30% (v/v) MPD  |  |  |  |  |
| D8       | 2,D2                      | 0.1 M HEPES pH 7.5, 20% (w/v) PEG 10000, 8% (v/v) Ethylene glycol  |  |  |  |  |
| D9       | 2,D3                      | 0.09 M HEPES pH 7.5, 1.26 M tri-Sodium citrate, 10% (v/v) Glycerol   |  |  |  |  |
| D10      | 2,D4                      | 1.7 M Ammonium sulfate, 0.085 M HEPES pH 7.5, 1.7% (v/v) PEG 400, 15% (v/v) Glycerol                                   |  |  |  |  |
| D11      | 2,D5                      | 0.05 M Lithium sulfate, 0.1M HEPES pH 7.5, 30% (v/v) PEG 600, 10% (v/v) Glycerol                                       |  |  |  |  |
| D12      | 2,D6                      | 0.1M HEPES pH 7.5, 30% (v/v) 1,2-Propanediol, 20% (v/v) PEG 400  |  |  |  |  |



| Location | Crystallization condition |   |  |  |  |  |  |
|----------|---------------------------|---|--|--|--|--|--|
| E1       | 3,A1                      | 0.2 M Ammonium sulfate, 0.1M Tris pH 7.0, 25% (v/v) 1,2-Propanediol, 10% (v/v) Glycerol                             |  |  |  |  |  |
| E2       | 3,A2                      | 0.1M HEPES pH 7.5, 5% (w/v) PEG 3000, 40% (v/v) Ethylene glycol   |  |  |  |  |  |
| E3       | 3,A3                      | 0.2 M Ammonium sulfate, 0.1M Tris pH 7.0, 40% (v/v) MPD   |  |  |  |  |  |
| E4       | 3,A4                      | 4.0 M Sodium formate  |  |  |  |  |  |
| E5       | 3,A5                      | 3.6 M Sodium formate, 10% (v/v) Glycerol  |  |  |  |  |  |
| E6       | 3,A6                      | 0.2 M Calcium acetate, 0.1M HEPES pH 7.5, 40% (v/v) PEG 400   |  |  |  |  |  |
| E7       | 3,B1                      | 0.2 M Sodium chloride, 0.1 M Tris pH 7.0, 30% (w/v) PEG 3000  |  |  |  |  |  |
| E8       | 3,B2                      | 0.2 M Lithium sulfate, 0.1 M Tris pH 7.0, 1.0 M Sodium/Potassium tartrate   |  |  |  |  |  |
| E9       | 3,B3                      | 0.2 M Calcium acetate, 0.1M Sodium cacodylate pH 6.5, 40% (v/v) PEG 600   |  |  |  |  |  |
| E10      | 3,B4                      | 0.1 M HEPES pH 6.5, 0.8 M Ammonium sulfate  |  |  |  |  |  |
| E11      | 3,B5                      | 0.1 M HEPES pH 7.0, 3.2 M Ammonium sulfate  |  |  |  |  |  |
| E12      | 3,B6                      | 0.1 M HEPES pH 6.5, 30% (w/v) PEG 6000  |  |  |  |  |  |
| F1       | 3,C1                      | 1.0 M Lithium chloride, 0.1 M HEPES pH 7.0  |  |  |  |  |  |
| F2       | 3,C2                      | 1 M Sodium chloride, 0.1M Sodium cacodylate pH 6.5, 30% (v/v) PEG 600, 10% (v/v) Glycerol                           |  |  |  |  |  |
| F3       | 3,C3                      | 0.2 M Zinc acetate, 0.1 M Sodium cacodylate pH 6.5, 10% (v/v) Isopropanol   |  |  |  |  |  |
| F4       | 3,C4                      | 0.2 M Calcium acetate, 0.1M Sodium cacodylate pH 6.5, 45% (v/v) Glycerol  |  |  |  |  |  |
| F5       | 3,C5                      | 0.1 M HEPES pH 7.0, 30% (v/v) Jeffamine M-600   |  |  |  |  |  |
| F6       | 3,C6                      | 0.1 M Sodium dihydrogen phosphate/ 0.1 M potassium dihydrogen phosphate,<br>0.1 M MES pH 6.5, 2.0 M Sodium chloride |  |  |  |  |  |
| F7       | 3,D1                      | 0.16 M Zinc acetate, 0.08 M Sodium cacodylate pH 6.5, 14.4% (w/v) PEG 8000,<br>20% (v/v) Glycerol                   |  |  |  |  |  |
| F8       | 3,D2                      | 0.1M Sodium citrate pH 5.5, 30% (v/v) 1,2-Propanediol, 20% (v/v) MPD  |  |  |  |  |  |
| F9       | 3,D3                      | 0.2 M Zinc acetate, 20% (w/v) PEG 3350  |  |  |  |  |  |
| F10      | 3,D4                      | 0.1M Sodium citrate pH 5.5, 5% (w/v) PEG 1000, 35% (v/v) Isopropanol  |  |  |  |  |  |
| F11      | 3,D5                      | 0.1M MES pH 6.0, 30% (v/v) PEG 600, 5% (w/v) PEG 1000, 10% (v/v) Glycerol   |  |  |  |  |  |
| F12      | 3,D6                      | 0.1M Sodium citrate pH 5.5, 40% (v/v) MPD   |  |  |  |  |  |
| G1       | 4,A1                      | 0.2 M Zinc acetate, 0.1M Imidazole pH 8.0, 35% (v/v) Isopropanol  |  |  |  |  |  |
| G2       | 4,A2                      | 0.1 M MES pH 6.0, 1.0 M Sodium/Potassium tartrate   |  |  |  |  |  |
| G3       | 4,A3                      | 0.2 M Lithium sulfate, 0.1 M MES pH 6.0, 20% (v/v) Butanediol   |  |  |  |  |  |
| G4       | 4,A4                      | 0.2 M Zinc acetate, 0.1 M MES pH 6.0, 15% (v/v) Ethanol   |  |  |  |  |  |
| G5       | 4,A5                      | 0.1 M MES pH 5.0, 1.6 M Ammonium sulfate  |  |  |  |  |  |
| G6       | 4,A6                      | 0.1 M MES pH 5.0, 30% (w/v) PEG 6000  |  |  |  |  |  |
| G7       | 4,B1                      | 0.2 M Zinc acetate, 0.1M Imidazole pH 8.0, 40% (v/v) PEG 300  |  |  |  |  |  |
| G8       | 4,B2                      | 0.2 M Ammonium acetate, 0.1 M Sodium citrate pH 5.6, 30% (v/v) MPD  |  |  |  |  |  |
| G9       | 4,B3                      | 0.01 M Iron(II)chloride, 0.1 M Sodium citrate pH 5.6, 10% (v/v) Jeffamine M-600                                     |  |  |  |  |  |
| G10      | 4,B4                      | 0.7 M Ammonium dihydrogen phosphate, 0.07 M Sodium citrate pH 5.6, 30% (v/v) Glycerol                               |  |  |  |  |  |
| G11      | 4,B5                      | 0.2 M Lithium sulfate, 0.1 M Sodium citrate pH 5.5, 15% (v/v) Ethanol   |  |  |  |  |  |
| G12      | 4,B6                      | 0.05 M Calcium acetate, 0.1M Sodium acetate pH 4.5, 40% (v/v) 1,2-Propanediol                                       |  |  |  |  |  |
| H1       | 4,C1                      | 0.1M Sodium acetate pH 4.5, 35% (v/v) Isopropanol   |  |  |  |  |  |
| H2       | 4,C2                      | 0.2 M Ammonium acetate, 0.1 M Sodium acetate pH 4.6, 30% (w/v) PEG 4000   |  |  |  |  |  |
| H3       | 4,C3                      | 0.17 M Ammonium acetate, 0.085 M Sodium acetate pH 4.6, 25.5% (w/v) PEG 4000,<br>15% (v/v) Glycerol                 |  |  |  |  |  |
| H4       | 4,C4                      | 0.2 M Zinc acetate, 0.1 M Sodium acetate pH 4.5, 20% (w/v) PEG 1000   |  |  |  |  |  |
| H5       | 4,C5                      | 0.1 M Sodium acetate pH 4.5, 1.0 M di-Ammonium phosphate  |  |  |  |  |  |
| H6       | 4,C6                      | 0.1 M Sodium acetate pH 4.5, 0.8 M Sodium dihydrogen phosphate/<br>1.2 M di-Potassium hydrogen phosphate            |  |  |  |  |  |
| H7       | 4,D1                      | 0.2 M Ammonium sulfate, 0.1M Phosphate-citrate pH 4.2, 40% (v/v) Ethylene glycol                                    |  |  |  |  |  |
| H8       | 4,D2                      | 10% (v/v) Ethanol, 1.5 M Sodium chloride  |  |  |  |  |  |
| H9       | 4,D3                      | 1.5 M Ammonium sulfate, 25% (v/v) Glycerol  |  |  |  |  |  |
| H10      | 4,D4                      | 0.1 M Phosphate-citrate pH 4.2, 1.6 M Sodium dihydrogen phosphate/<br>0.4 M di-Potassium hydrogen phosphate         |  |  |  |  |  |
| H11      | 4,D5                      | 0.1 M Citric Acid pH 2.5, 30% (w/v) PEG 6000  |  |  |  |  |  |
| H12      | 4,D6                      | 1.0 M Lithium chloride, 0.1 M Citric Acid, 30% (w/v) PEG 6000   |  |  |  |  |  |

Order EasyXtal and NeXtal products online at [www.qiagen.com/crystallization](http://www.qiagen.com/crystallization)

Trademarks: QIAGEN®, EasyXtal®, NeXtal® (QIAGEN Group) 09/2008 © 2006–2008 QIAGEN, all rights reserved.

[www.qiagen.com](http://www.qiagen.com)

Australia ■ 1-800-243-800

Austria ■ 0800/281010

Belgium ■ 0800-79612

Canada ■ 800-572-9613

China ■ 0086 21 3865 3865

Denmark ■ 80-885945

Finland ■ 0800-914416

France ■ 01-60-920-930

Germany ■ 02103-29-12000

Hong Kong ■ 800 933 965

Ireland ■ 1800 555 049

Italy ■ 800 787980

Japan ■ 03-5547-0811

Korea (South) ■ 1544 7145

Luxembourg ■ 8002 2076

The Netherlands ■ 0800 0229592

Norway ■ 800-18859

Singapore ■ 65-67775366

Spain ■ 91-630-7050

Sweden ■ 020-790282

Switzerland ■ 055-254-22-11

UK ■ 01293-422-911

USA ■ 800-426-8157

