Laemmli 2x buffer (keep @RT)

pH= 6.8

SDS 4 %

Glycerol 20 %

Tris-HCl 120 mM

DTT 4 mM (add fresh each day)

5 mM EDTA

5 mM EGTA

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Laemmli 2x buffer | Cat No# | M.W. | 50 ml | 100 ml | 200 ml | 500 ml |
| SDS (4%) | L3771 | 288.38 | 2 gr | 4 gr | 8 gr | 20 gr |
| Glycerol (20%) (weigh it) | G5516 | 92.09 | 8 ml | 16 ml | 32 ml | 80 ml |
| Trizma 120 mM | T1503 | 121.14 | 0.727 gr | 1.45 gr | 2.907 gr | 7.268 gr |
| DTT 4 mM (add fresh) | D9163 | 154.25 | 30.85 mg | 61.7 mg | 123.4 mg | 308.5 mg |
| EDTA 5 mM | E5134 | 372.24 | 93.06 mg | 186.1 mg | 372.24 mg | 930.6 mg |
| EGTA 5 mM |  | 380.35 | 95.1 mg | 190.17 mg | 380.35 mg | 951 mg |
| pH 6.8 (HCl) | - | - |  | - | - | - |

Benzonase buffer pH= 7.2

MgCl2 2 mM

20 mM Tris-HCl

Benzonase 0.1 ul/ml of sample, ~1-2 mg/ml

Protease inhibitors (EDTA-free, use pills)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Benzonase buffer | Cat No# | M.W. | 50 ml | 100 ml | 200 ml | 500 ml |
| Trizma 20 mM | T1503 | 121.14 | 121.14 mg | 242.28 mg | 484.56 mg | 1.2114 gr |
| Benzonase 0.1 ul/ml |  |  | 5 ul | 10 ul | 20 ul | 50 ul |
| MgCl2 2 mM | M1028 | 1 M stock | 100 ul | 200 ul | 400 ul | 1 ml |
|  |  |  |  |  |  |  |
| pH 7.2 (HCl) | - | - |  | - | - | - |

LDS 4x without bromophenol blue

|  |  |  |  |
| --- | --- | --- | --- |
|  | M.W. | Final conc. for 4x | Amount for 5 ml |
| TRIS | 121.14 | 0.5 M | 302.85 milligrams |
| LDS | - | 8% | 0.4 gr |
| Glycerol | From 100% stock | 40% | 2 ml |
| EDTA | From 0.5 M stock | 2 mM | 20 microliters |
| pH = 8.5 (HCl) |  |  |  |