

DM/KY

To prepare the DM/KY solution, dilute the 10x KY stock into the appropriate volume of DM.

DM (dissociation medium)

The details below are for 1000ml DM.

Add the ingredients below to distilled water, make up to 1000 ml and then filter sterilize. Store at 4°C in refrigerator.

Ingredient	Final conc'n	Stock conc'n	Volume to add for 1000 ml
Na ₂ SO ₄	81.8 mM	1 M	81.8 ml
K ₂ SO ₄	30 mM	0.5 M	60 ml
MgCl ₂	5.8 mM	1 M	5.8 ml
CaCl ₂	0.25 mM	0.1 M	2.52 ml
HEPES	1 mM	1 M	1 ml
Glucose	20 mM	2.5 M	8 ml
Phenol Red	0.001%	0.5 %	2 ml
NaOH	0.16 mM	0.1 N	1.6 ml

10x KY stock (10 mM Kynurenic acid/100 mM MgCl₂)

When making up 10x kynurenic acid gradually add small amounts of kynurenic acid to water containing phenol red and use the color of the phenol red to titrate the pH of the solution back up to about 7.4 as the acid dissolves.

Filter, sterilize and store at 4°C.

Ingredient	Final conc'n	Stock conc'n	Volume to add for 1000ml
Kynurenic acid	10 m		1.8925 g
Phenol Red (Sigma P-0290)	0.0025 %	0.5 %	5 ml
HEPES	5 mM	1 M	5 ml
MgCl ₂	100 mM	1 M	100 ml
NaOH		1 N	Add drop wise to titrate pH