KREBS-RINGER SOLUTION FOR 5.5 L OF WATER (172 mM)

Prepare in this sequence:

1. Sodium Chloride 124	**79.72g**	
2. Potassium Chloride 2.5	**2.05g**	
3. Sodium Phosphate, monobasic 1.25	**1.90g**	**USE FINE**
4. Sodium Bicarbonate 26	**24.03g**	**SCALES**

Prepare separately 100ml of Stock 1M Calcium Chloride & 100 ml of Stock Magnesium Sulfate solutions in water:

1. Calcium Chloride	**14.7g**
2. Magnesium sulfate (w/7H_2O)	**24.65g**

Before preparing the solution:

-Clean the scales surfaces with wet and then dry kimwipes

-Rinse weighing spatulas in deionized water and dry out with kimwipes

-Take weighing dishes only from closed boxes in the draw

-Put weighing dishes and weighing spatulas only on a clean paper towel

-After each chemical weighed wipe out the spatulas with kimwipes

-After weighing chemicals tightly close the cups of the chemicals/ use only separate bottles of these chemicals/ not on stock shelf

-After the solution is steered well tightly close the cup on the bottle and put the bottle in the cold room right away

-Btl of cold water to make this up is in cold room

For 1.5L of the final solution:
750ml Ringer +750ml deionized water
+ 3.0 ml of Stock Calcium Chloride (2mM)
+ 1.5 ml of Stock Magnesium Sulfate (1mM)
+ 1.5 scoop of Dextrose (10mM)

Sucrose Solution

	250ml	500ml
5x Stock solution (ml)	50	100
DDW (ml)	200	400
Ca2+ (0.5mM, ml)	0.12	0.24
Mg2+ (7mM, ml)	1.7	3.4
Sucrose (gram)	19	38

From Geiger JR and Jonas P (2000) Dynamic control of presynaptic Ca2+ inflow by fast-interactivating K+ channels in hippocampal mossy fiber boutons. Neuron 28:927-939

For dissection and storage of slices, a sucrose-containing physiological saline with **(make 4 liters)**

NaCl	87 mM	20.34 g
Sucrose	75 mM	102.69 g
NaHCO3	25 mM	8.4 g
Glucose	25 mM	18.02 g
KCl	2.5 mM	0.745 g
NaH2PO4	**1.25 mM**	**0.69**
CaCl2	0.5 mM	-from stock
MgCl2	7 mM	-from stock

Storage in 35^0C, 1st 30min, use **sucrose** solution then transfer to normal solution for another 30min.