2023-05-22 N2-Barcode Drug Pressure

Drug Diltutions

Make $1\mu\mathrm{M}$ working stock of each drug

* Doxorubicin: 1μ L 10mM stock in 10mL media * Methotrexate: 1μ L 10mM stock in 10mL media * Vincristine: 333.33μ L 30mM stock in 10mL media

Doxorubicin

Drug	Drug ID	Dilution volume	Media Volume	[Final Drug]
Doxorubicin	Dox 1	$3600 \ \mu L \ (from WS)$	$8400~\mu\mathrm{L}$	300nm
Doxorubicin	Dox 2	$6000 \ \mu L \ (from Dox 1)$	$6000~\mu\mathrm{L}$	$150\mathrm{nm}$
Doxorubicin	Dox 3	$6000 \ \mu L \ (from Dox 2)$	$6000~\mu\mathrm{L}$	$75\mathrm{nm}$
Doxorubicin	Dox 4	$6000 \ \mu L \ (from Dox 3)$	$6000~\mu\mathrm{L}$	$37.5\mathrm{nm}$
Doxorubicin	Dox 5	$6000 \ \mu L \ (from Dox 4)$	$6000~\mu\mathrm{L}$	$18.75\mathrm{nm}$

Methotrexate

Drug	Drug ID	Dilution volume	Media Volume	[Final Drug]
Methotrexate	Meth 1	$1200 \ \mu L \ (from WS)$	$10800 \; \mu L$	100nm
Methotrexate	Meth 2	$6000 \ \mu L \ (from Meth 1)$	$6000~\mu\mathrm{L}$	$50\mathrm{nm}$
Methotrexate	Meth 3	$6000 \ \mu L \ (from Meth 2)$	$6000~\mu\mathrm{L}$	$20\mathrm{nm}$
Methotrexate	Meth 4	$6000 \ \mu L \ (from Meth 3)$	$6000~\mu\mathrm{L}$	$10\mathrm{nm}$
Methotrexate	Meth 5	6000 μ L (from Meth 4)	$6000~\mu\mathrm{L}$	$5\mathrm{nm}$

Vincristine

Drug	Drug ID	Dilution Volume	Media Volume	[Final Drug]
Vincristine	Vin 1	$48 \ \mu L \ (from WS)$	$11952~\mu L$	4nm
Vincristine	Vin 2	$6000 \ \mu L \ (from \ Vin \ 1)$	$6000~\mu\mathrm{L}$	$2\mathrm{nm}$
Vincristine	Vin 3	$6000 \ \mu L \ (from \ Vin \ 2)$	$6000~\mu\mathrm{L}$	1nm
Vincristine	Vin 4	$6000 \ \mu L \ (from \ Vin \ 3)$	$6000~\mu\mathrm{L}$	$0.5\mathrm{nm}$
Vincristine	Vin 5	6000 μ L (from Vin 4)	$6000~\mu\mathrm{L}$	$0.25\mathrm{nm}$

Instructions

- 1. Make drug dilutions and DMSO tubes $(3\mu L \text{ DMSO in } 30\text{mL})$
- 2. Collect wells into labeled 15mL tubes
- 3. Count cells
- 4. Spin down volume of CS which $\leq 1.0 \text{x} 10^6$
- 5. Resuspend in associated drug mix and add back to well