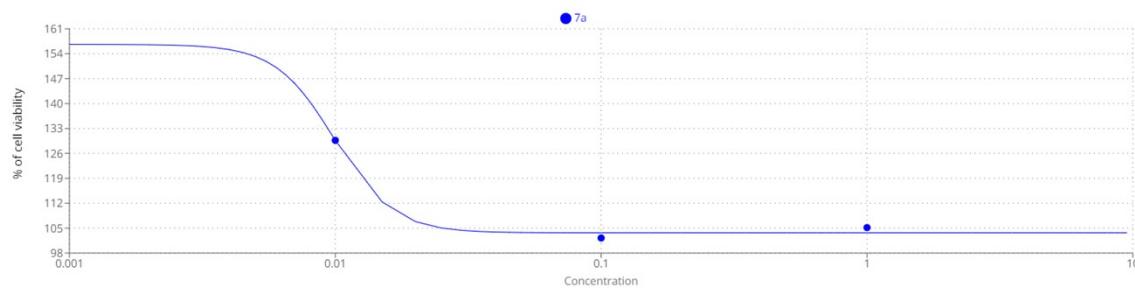


Supporting Information for Review Purpose Only

One flask cascade approach to complex pyrano[2,3-c]pyrazole-pyrazolone hybrid heterocyclic system and its initiatory neurobiological profiling

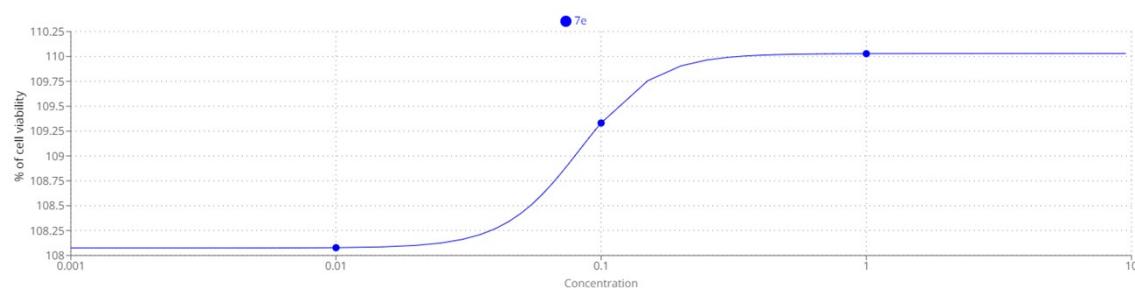
Alagesan Balasubramani,^a K. A. Sudarshana,^{a,b} Roli Kushwaha,^{b,c} Sumana Chakravarty,^{b,c} Srihari Pabbaraja^{a,c*} and Goverdhan Mehta^{d*}

Dose-response curves for IC₅₀ calculations – SRB Assay



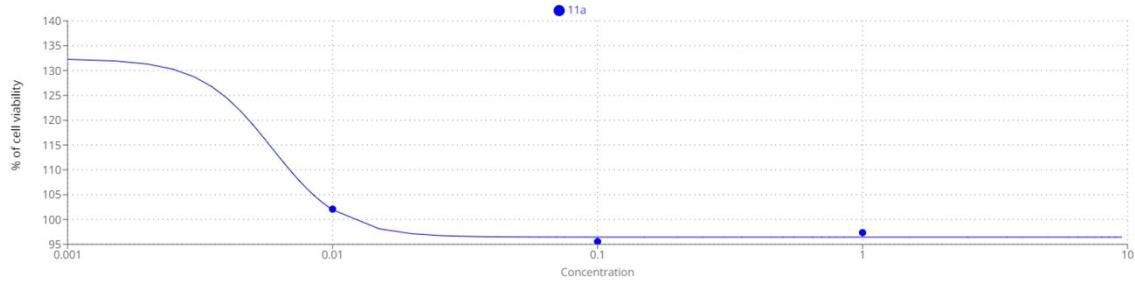
IC₅₀ Regression Results [7a]

Parameter	Value
IC ₅₀	0.0099
Equations	
Equation	$Y = 103.6882 + \frac{156.6318 - 103.6882}{1 + (\frac{X}{0.0099})^{3.9243}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC_{50}})^{\text{Hill coefficient}}}$



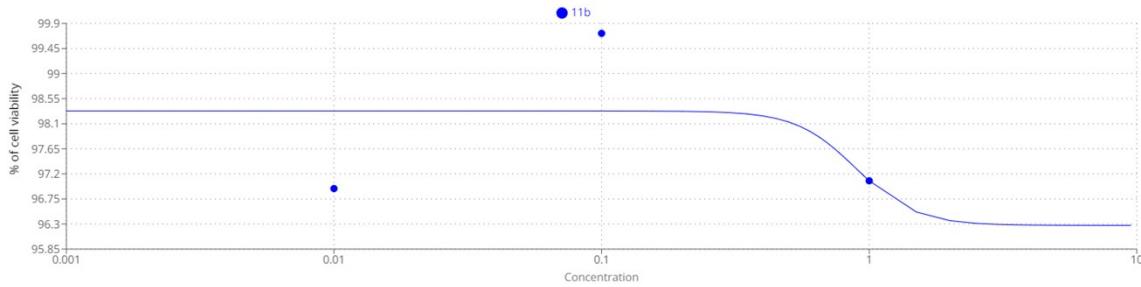
IC₅₀ Regression Results [7e]

Parameter	Value
IC ₅₀	0.0824
Equations	
Equation	$Y = 108.0749 + \frac{110.0291 - 108.0749}{1 + (\frac{X}{0.0824})^{-3.0393}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC_{50}})^{\text{Hill coefficient}}}$



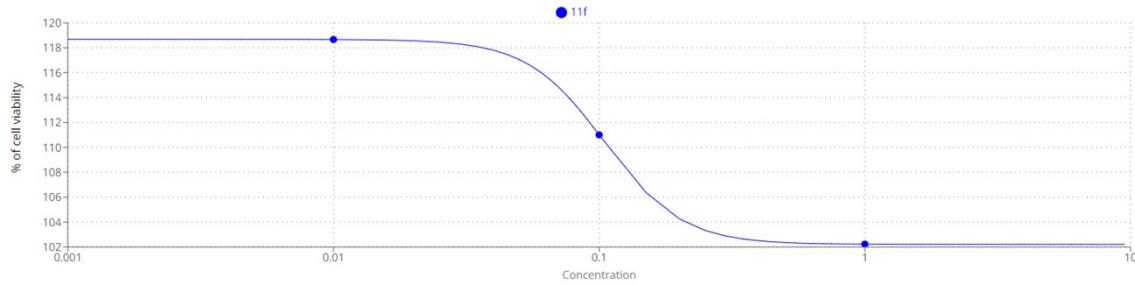
IC₅₀ Regression Results [11a]

Parameter	Value
IC ₅₀	0.0059
Equations	
Equation	$Y = 96.4472 + \frac{132.3661 - 96.4472}{1 + (\frac{X}{0.0059})^{3.2369}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC_{50}})^{\text{Hill coefficient}}}$



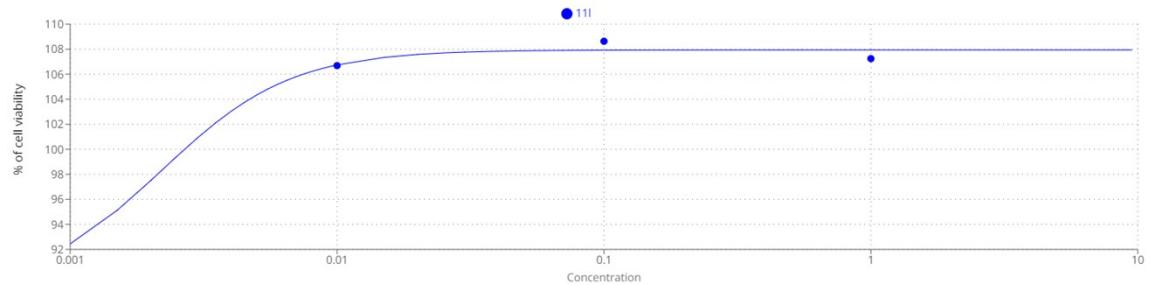
IC₅₀ Regression Results [11b]

Parameter	Value
IC ₅₀	0.8909
Equations	
Equation	$Y = 98.3286 + \frac{96.2753 - 98.3286}{1 + (\frac{X}{0.8909})^{-3.88}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC_{50}})^{\text{Hill coefficient}}}$



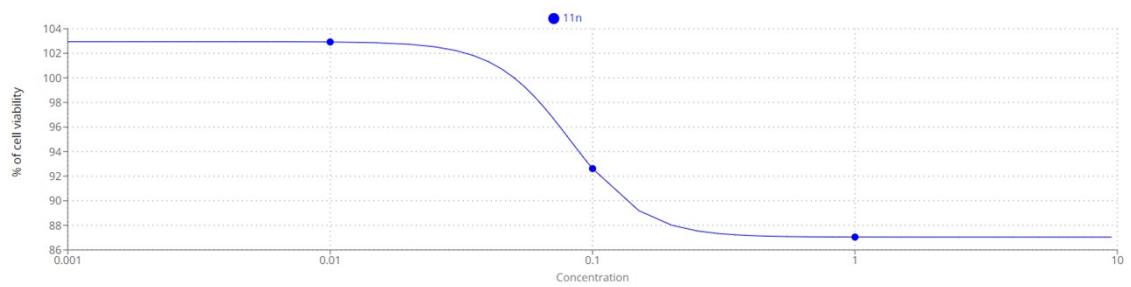
IC₅₀ Regression Results [11f]

Parameter	Value
IC ₅₀	0.1046
Equations	
Equation	$Y = 102.2096 + \frac{118.6773 - 102.2096}{1 + (\frac{X}{0.1046})^{-3.002}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC_{50}})^{\text{Hill coefficient}}}$



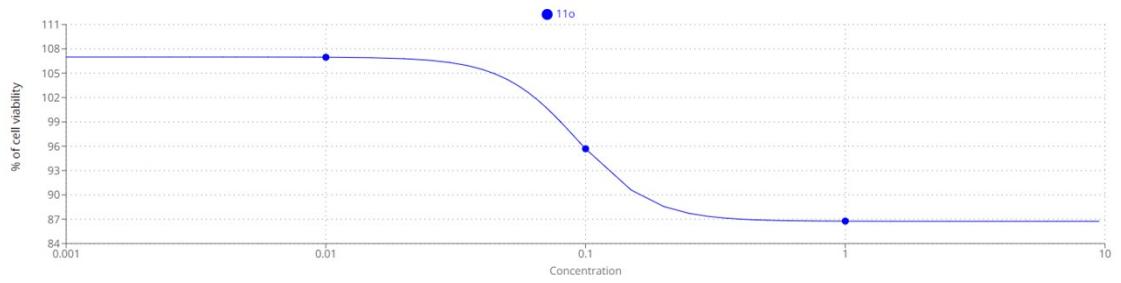
IC₅₀ Regression Results [11i]

Parameter	Value
IC ₅₀	0.0022
Equations	
Equation	$Y = 88.6633 + \frac{107.9423 - 88.6633}{1 + (\frac{X}{0.0022})^{-1.7911}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC50})^{\text{Hill coefficient}}}$



IC₅₀ Regression Results [11n]

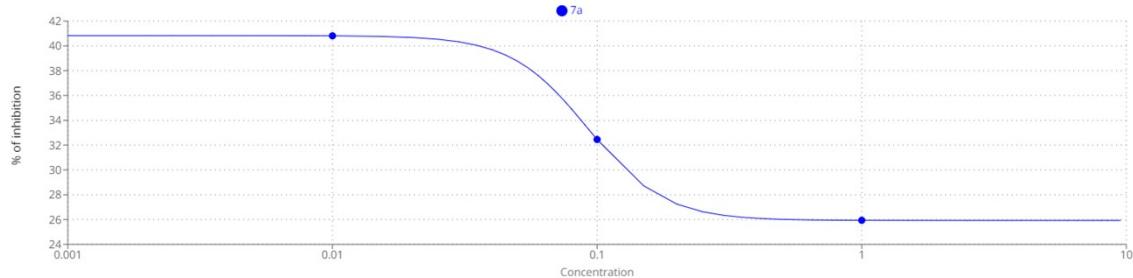
Parameter	Value
IC ₅₀	0.0817
Equations	
Equation	$Y = 87.0397 + \frac{102.9511 - 87.0397}{1 + (\frac{X}{0.0817})^{3.0493}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC50})^{\text{Hill coefficient}}}$



IC₅₀ Regression Results [11o]

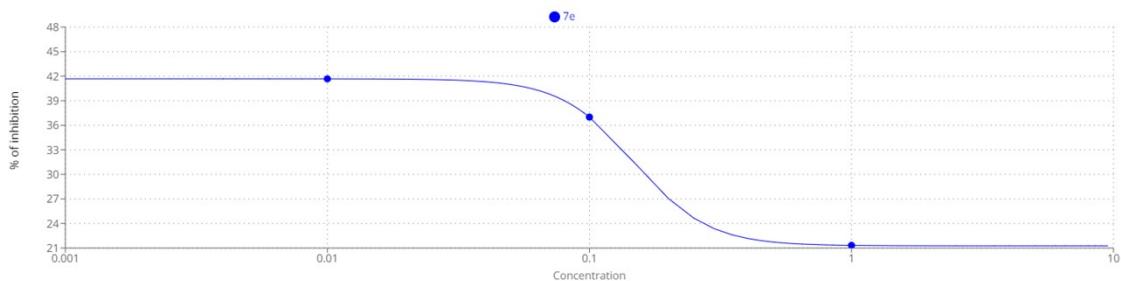
Parameter	Value
IC ₅₀	0.0924
Equations	
Equation	$Y = 86.7529 + \frac{106.9893 - 86.7529}{1 + (\frac{X}{0.0924})^{3.0009}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC50})^{\text{Hill coefficient}}}$

Dose-response curves for IC₅₀ calculations – AChE Assay



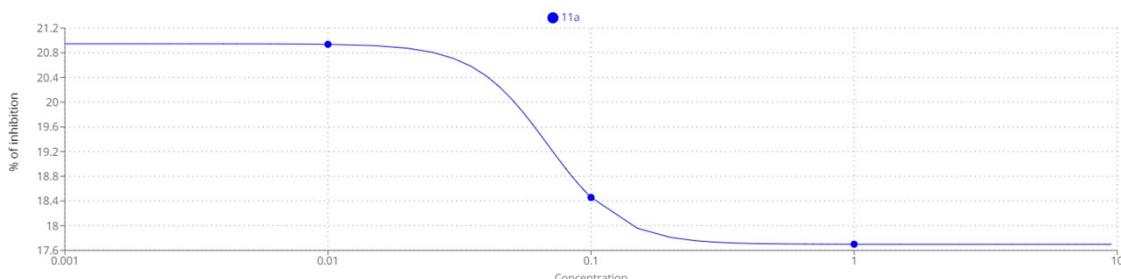
IC₅₀ Regression Results [7a]

Parameter	Value
IC ₅₀	0.092
Equations	
Equation	$Y = 25.9257 + \frac{40.8303 - 25.9257}{1 + (\frac{X}{0.092})^{3.0021}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC50})^{\text{Hill coefficient}}}$



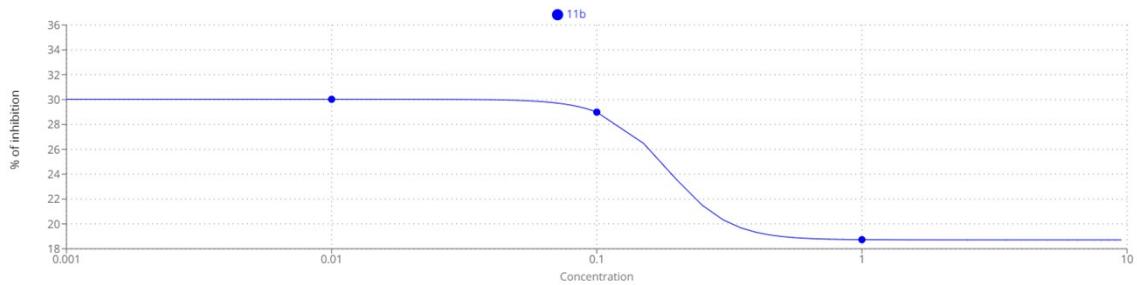
IC₅₀ Regression Results [7e]

Parameter	Value
IC ₅₀	0.1482
Equations	
Equation	$Y = 21.2713 + \frac{41.6767 - 21.2713}{1 + (\frac{X}{0.1482})^{3.0851}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC50})^{\text{Hill coefficient}}}$



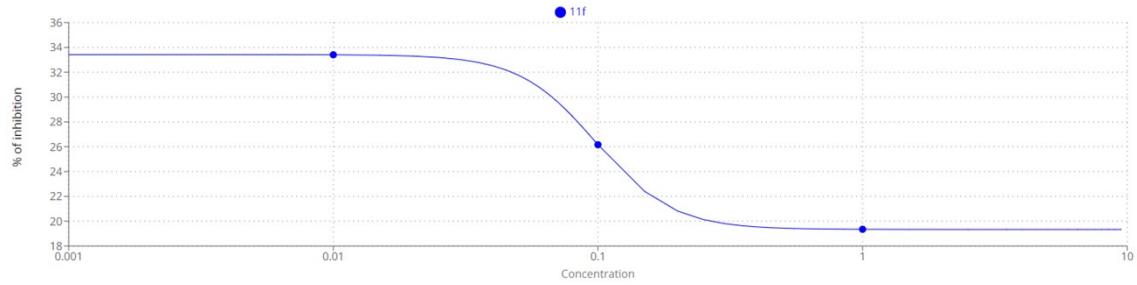
IC₅₀ Regression Results [11a]

Parameter	Value
IC ₅₀	0.0682
Equations	
Equation	$Y = 17.6989 + \frac{20.9451 - 17.6989}{1 + (\frac{X}{0.0682})^{3.1001}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC50})^{\text{Hill coefficient}}}$



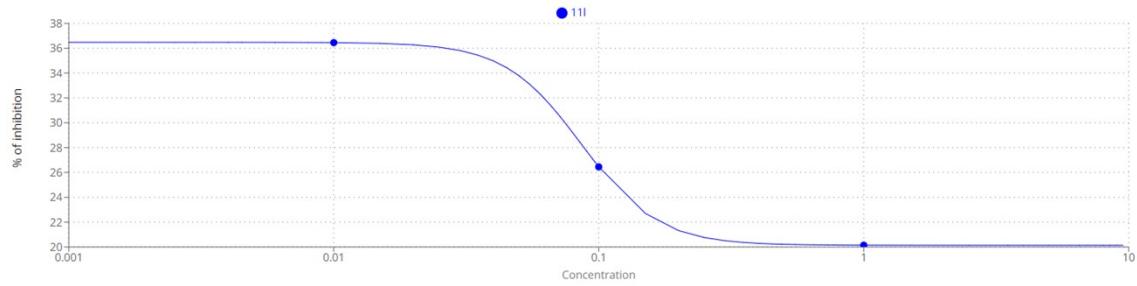
IC_{50} Regression Results [11b]

Parameter	Value
IC_{50}	0.1852
Equations	
Equation	$Y = 18.7119 + \frac{30.0278 - 18.7119}{1 + (\frac{X}{0.1852})^{3.73}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC_{50}})^{\text{Hill coefficient}}}$



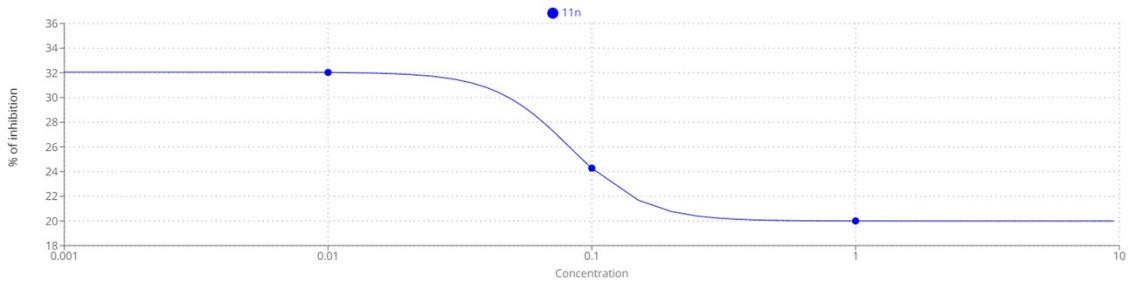
IC_{50} Regression Results [11f]

Parameter	Value
IC_{50}	0.098
Equations	
Equation	$Y = 19.3346 + \frac{33.4207 - 19.3346}{1 + (\frac{X}{0.098})^{3.0009}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC_{50}})^{\text{Hill coefficient}}}$



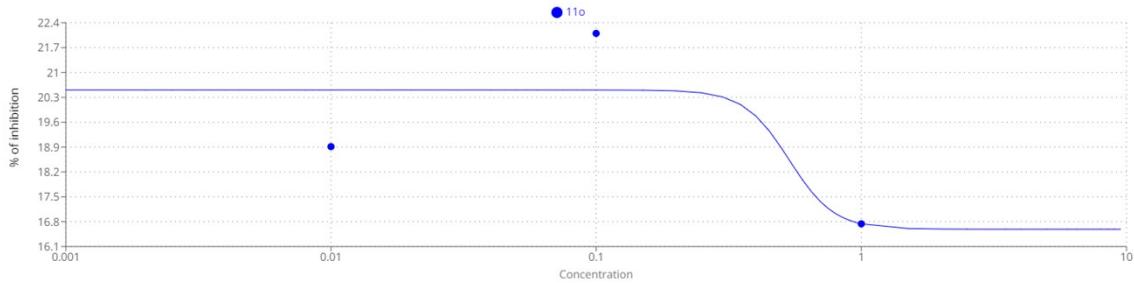
IC_{50} Regression Results [11l]

Parameter	Value
IC_{50}	0.0858
Equations	
Equation	$Y = 20.1349 + \frac{36.4746 - 20.1349}{1 + (\frac{X}{0.0858})^{3.0102}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC_{50}})^{\text{Hill coefficient}}}$



IC₅₀ Regression Results [11n]

Parameter	Value
IC ₅₀	0.082
Equations	
Equation	$Y = 19.9935 + \frac{32.0505 - 19.9935}{1 + (\frac{X}{0.082})^{3.0065}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC_{50}})^{Hill\ coefficient}}$



IC₅₀ Regression Results [11o]

Parameter	Value
IC ₅₀	0.5337
Equations	
Equation	$Y = 16.5878 + \frac{20.5073 - 16.5878}{1 + (\frac{X}{0.5337})^{3.1166}}$
Equation Form	$Y = \text{Min} + \frac{\text{Max} - \text{Min}}{1 + (\frac{X}{IC_{50}})^{Hill\ coefficient}}$