

Anticonvulsant Screening Program

Test 76 Results - In-vitro Hippocampal Slice Culture Neuroprotection Assay (NP)

ASP ID: 21 A Screen ID: 1

Solvent Code: DMSO Solvent Prep:

Test Date: 01-Dec-2010

Reference: 458: 114

Summary of NP Assay: NMDA

● Test Result: No Neuroprotection

Comments:

TEST 76: *in vitro* HIPPOCAMPAL SLICE CULTURE NEUROPROTECTION ASSAY

Compound 1 : ADD Number: 000021 Batch: A Date Started: 01-Dec-2010

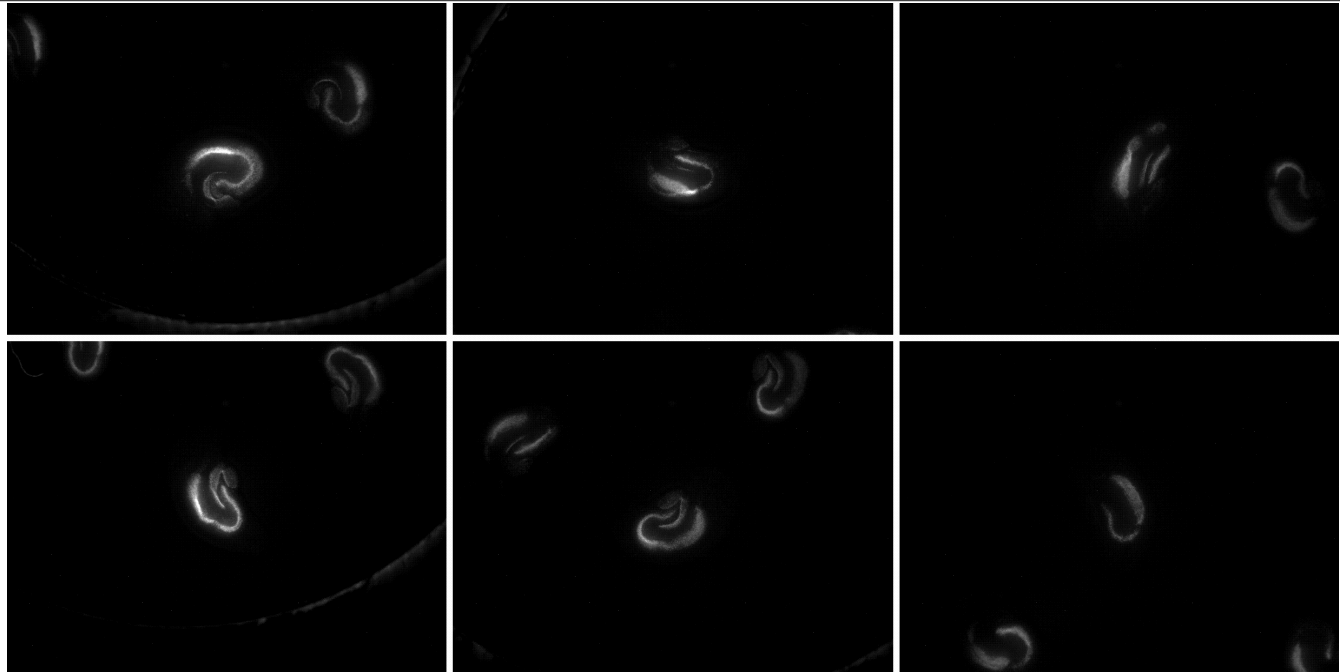
Compound 2 : ADD Number: Batch: Date Completed: 03-Dec-2010

References: 458: 114

Excitotoxin: NMDA Insult Duration: 4 Hours Solvent: DMSO

Primary Screen Results: No neuroprotection observed

EXPERIMENT IMAGES & WELL DESCRIPTION

A1	NMDA 10µM	A2	NMDA 10µM + 000021 10µM	A3	NMDA 10µM + 000021 10µM
					
B1	NMDA 10µM	B2	NMDA 10µM + 000021 100µM	B3	NMDA 10µM + 000021 100µM

PRIMARY SCREEN EXPERIMENT DESCRIPTION

The "Primary Screen Experiment" is a qualitative assessment of the ability of a compound to prevent excitotoxic cell death. Organotypic hippocampal slice cultures are treated with N-methyl-D-aspartate (NMDA) or kainic acid (KA) to induce neuronal cell death. Propidium iodide (PI), a membrane-impermeant compound, is included in all wells of the culture plate. Dying cells have compromised cell membranes, thus PI may diffuse into the cell, intercalate with DNA and fluoresce. Thus, the intensity of the PI fluorescence is proportional to the amount of cell death in the individual slices. Hippocampal slice cultures are treated with the excitotoxin alone, or where indicated above, with the excitotoxin and either one or two investigational compounds at the concentrations indicated. If neuroprotection occurs as a consequence of the added compound, slice cultures will have a visibly reduced fluorescent intensity when compared to the slice cultures that have been treated with the excitotoxin alone.

Anticonvulsant Screening Program

Test 76 Results - In-vitro Hippocampal Slice Culture Neuroprotection Assay (NP)

ASP ID: 21 A Screen ID: 2

Solvent Code: DMSO Solvent Prep:

Test Date: 01-Dec-2010

Reference: 458: 114

Summary of NP Assay: Kainic acid

● Test Result: No Neuroprotection

Comments:

TEST 76: *in vitro* HIPPOCAMPAL SLICE CULTURE NEUROPROTECTION ASSAY

Compound 1 : ADD Number: 000021 Batch: A Date Started: 01-Dec-2010

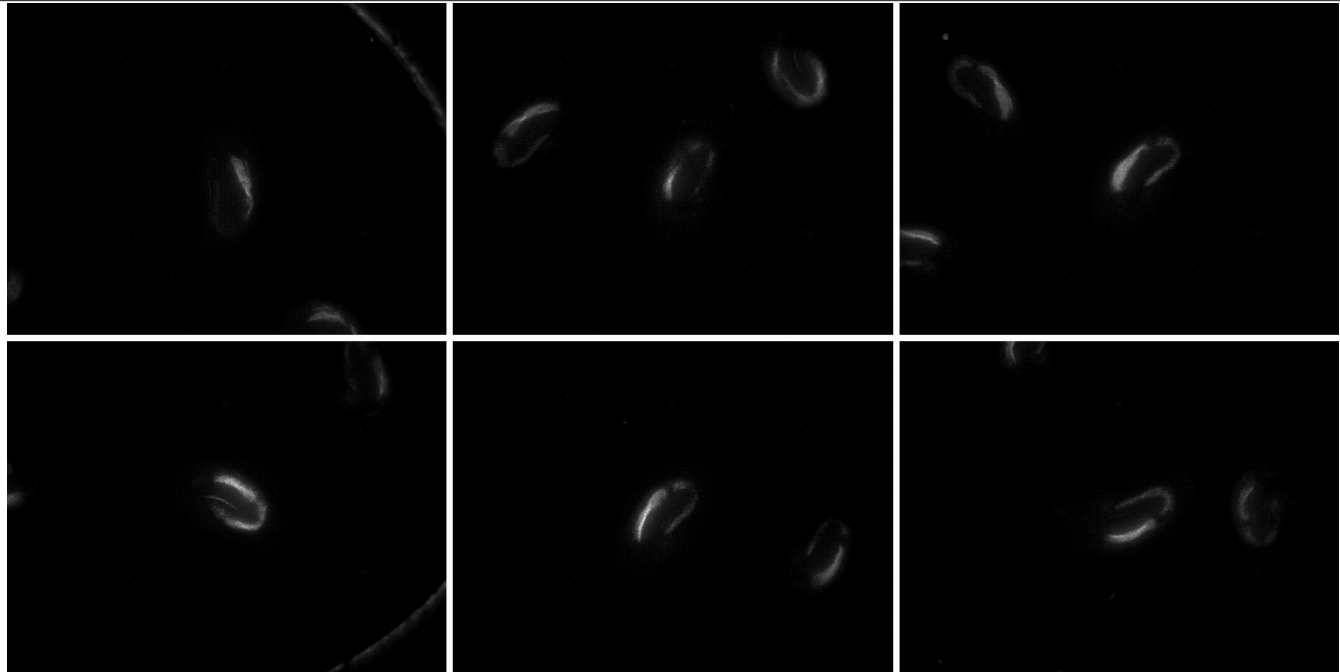
Compound 2 : ADD Number: Batch: Date Completed: 03-Dec-2010

References: 458: 114

Excitotoxin: Kainic Acid Insult Duration: 4 Hours Solvent: DMSO

Primary Screen Results: No neuroprotection observed

EXPERIMENT IMAGES & WELL DESCRIPTION

A1	KA 20µM	A2	KA 20µM +	A3	KA 20µM +
			000021 10µM		000021 10µM
					
B1	KA 20µM	B2	KA 20µM +	B3	KA 20µM +
			000021 100µM		000021 100µM

PRIMARY SCREEN EXPERIMENT DESCRIPTION

The "Primary Screen Experiment" is a qualitative assessment of the ability of a compound to prevent excitotoxic cell death. Organotypic hippocampal slice cultures are treated with N-methyl-D-aspartate (NMDA) or kainic acid (KA) to induce neuronal cell death. Propidium iodide (PI), a membrane-impermeant compound, is included in all wells of the culture plate. Dying cells have compromised cell membranes, thus PI may diffuse into the cell, intercalate with DNA and fluoresce. Thus, the intensity of the PI fluorescence is proportional to the amount of cell death in the individual slices. Hippocampal slice cultures are treated with the excitotoxin alone, or where indicated above, with the excitotoxin and either one or two investigational compounds at the concentrations indicated. If neuroprotection occurs as a consequence of the added compound, slice cultures will have a visibly reduced fluorescent intensity when compared to the slice cultures that have been treated with the excitotoxin alone.