



Your partner for hands-on
CNS electrophysiology

**GOS
SET***

**GAMMA OSCILLATIONS:
BENEFIT FROM A TRANSLATIONAL
BIOMARKER**

*Gamma Oscillations Package

MECHANISM OF ACTION



DRUG DISCOVERY

Neuronal rhythms are altered in schizophrenia, epilepsy, autism, ADHD, Alzheimer and Parkinson Diseases.

Oscillations in the gamma frequency range correspond to information transfer and their integration between different brain areas.

GOS SET - Gamma Oscillations Package



2 WEEKS

for top-line results
per test (3 tests possible)
+ 2 weeks for final report



INVESTIGATE

your compound
effect at neuronal
network level



NETWORK OSCILLATIONS



ELECTROPHYSIOLOGICAL slice recording with MULTI-ELECTRODE ARRAY (MEA)

THE BENEFITS OF THE PACKAGE

This set of *in vitro* assays provides a direct answer about your compound efficacy on a complex neuronal network, as well as a translational biomarker for further *in vitro/in vivo* investigations.

- ✓ High quality data
- ✓ Short turnaround
- ✓ Time & Cost saving

HOW?

- ✓ Evaluation of 1 compound at 1 concentration on 1-3 profiling tests
- ✓ Hippocampal slices from rats
- ✓ 9 slices per assay (3 control-slices + 6 compound-slices)
- ✓ Customized study plan: you choose the type or the combination of the assays you need

	3 TESTS (recordings)	Quantity of compound required
GOS 1	Does the compound trigger network oscillations?	15 to 40 mg
GOS 2	Evaluation of one compound on Carbachol-induced oscillations	10 to 30 mg
GOS 3	Evaluation of one compound on Kainate-induced oscillations	10 to 30 mg

EXAMPLE

Figure 1: Network oscillations induced by compound A and compound B

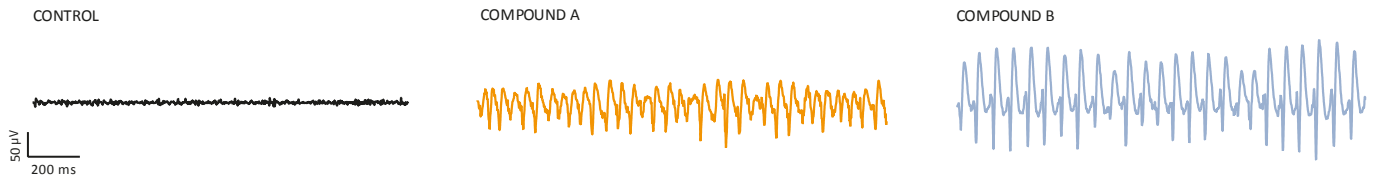


Figure 2: Power spectrum of Carbachol-induced oscillations before/after compound C exposure

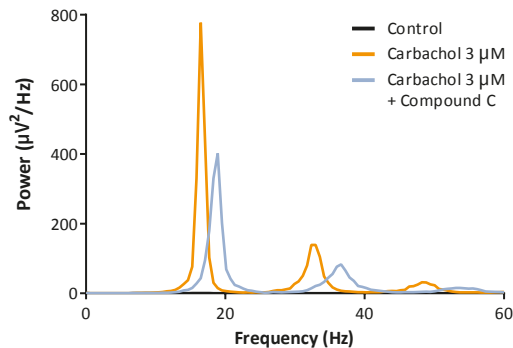
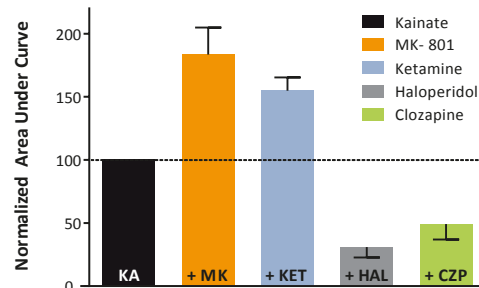


Figure 3: Modulation of Kainate-induced gamma oscillations by 100 μM Ketamine, 20 μM MK-801, 10 μM Haloperidol and 30 μM Clozapine exposure





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