NPS Standard Check

MEA Neuro Activity Assay

NeuroProof
NeuroProof Systems GmbH

NeuroProof Platform

NeuroProof uses its proprietary phenotypic technology platform for the recording and mathematical analysis of network activity from electrically active cells via microelectrode arrays. With its deep insights and high-quality standards NeuroProof delivers state-of-the-art results.

Applications

- Fast and efficient assessment of your compounds.
- First impression of compound effects: general activity, bursting behavior, oscillation and synchronization.
- Drug discovery and drug optimization programs.
- Assessment of acute neurotoxic effects.

Customer Value

- Most relevant spike train parameters, in a diagram and as a separate data file. Statistical significance test against the solvent control.
- Comparison with 5 relevant compounds from our database.
- High quality and reproducible data
- Standardized and cost-efficient projects.
- 8 weeks turnaround.
- No minimum order quantity.

Assay Protocol

Cell culture

Source: Primary cultures from NMRI mouse embryos E16;
Cultivation Time: 28 days. Tissue: Frontal cortex

Recording

Axion Maestro, 48 well MEA plates,
30-minute intervals used for data analysis, with baseline recording for normalization

Data points

Replicates: 8 per condition and 10 for the solvent control.
5 concentrations, cumulative application
15 functional parameters characterizing general activity, burst structure, oscillation, and synchronicity.

We provide

- A sample of the typical activity pattern
- The 15 most relevant spike train parameters, in a diagram and as a separate data file. Statistical significance against the solvent control.
- Comparison with 5 relevant compounds from our reference database.

We support the integration of our MEA recordings into your drug development workflow.

Easy Order:

Let us know, the number of your compounds and concentrations and your contact details and we generate you an offer.

Contact us

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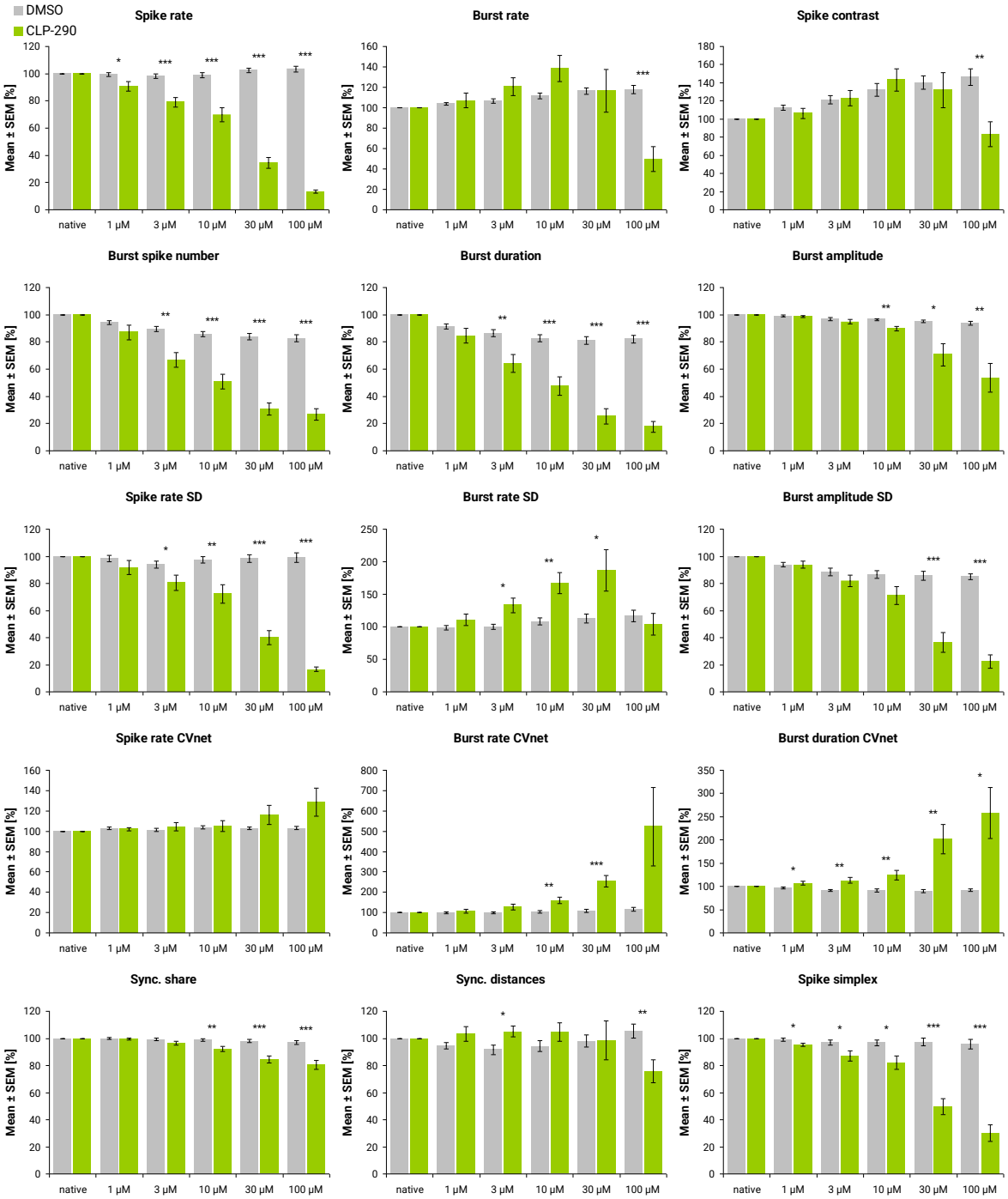
Sample data

The multiparametric response profile (general activity, burst structure, oscillation, synchronicity) is shown against the vehicle and representative compounds. Data are normalized to the baseline for each experiment.



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