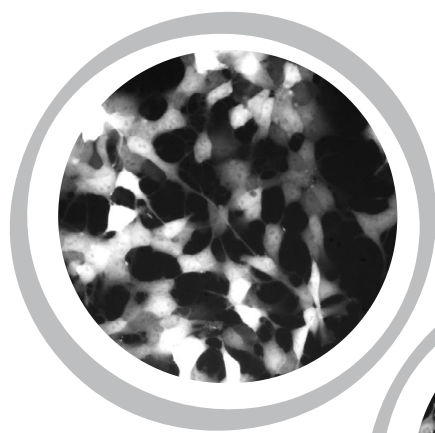


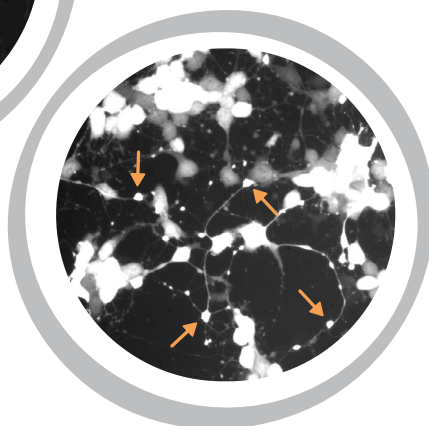
PARKINSON'S DISEASE IN VITRO MODEL

α -Synuclein aggregation assay



Basal conditions

Aggregation
induction



SH-SY5Y cell line stably expressing green or red fluorescent α -synuclein is induced to form α -synuclein aggregates. Before the aggregation process, cells are co-incubated with the test compounds during 24 hours to evaluate their effect preventing α -synuclein aggregation. Then, the cells are treated with staurosporine. After a 60-90 minutes treatment, the cells are fixed and the α -synuclein aggregates are quantified with an image analysis algorithm.

Day 1

**α -Synuclein
SH-SY5Y cell line**
Seed 30,000 cells/w
in 96 well-plates

Day 2

**Treatments with
test compounds**
Incubation O/N

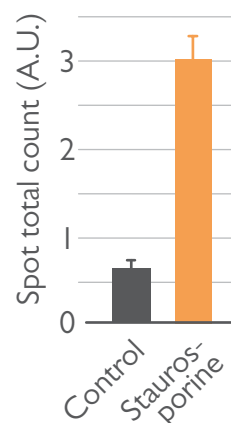
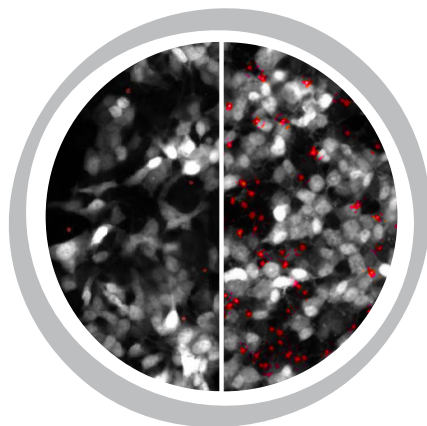
Day 3

**Treatments with
Staurosporine**
Incubation
30-60 min.



**α -Synuclein
aggregation
image
analysis**

**α -Synuclein
aggregation
in SH-SY5Y
neurites is
analyzed with
an image
analysis
algorithm.**



**The
addition of
Staurosporine
increases
aggregates
formation
4.9-fold.**