

CONTENT

Breaking News: JSW successfully renews GLP certificate



Animal Models for Parkinson's Disease: α-Synuclein and Beyond..... Page 2

High resolution overview of synuclein expression in transgenic mice automatically acquired and assembled from 280 images at 20x magnification. Original image size **12080x17970 pixels**. Human α-synuclein (green) and pan-synuclein (red).



GLP Certification.....Page 3

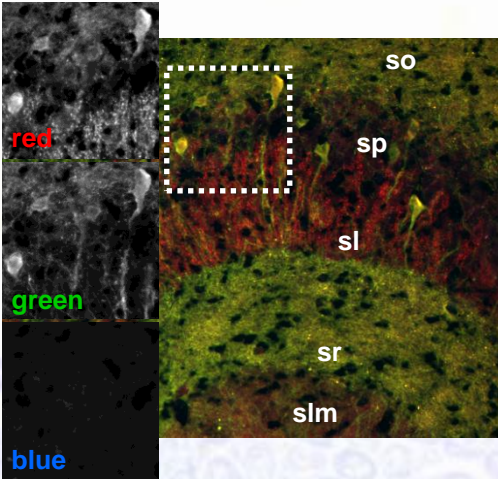
The certification emphasizes the high quality standard of all projects performed at JSW-Lifesciences GmbH.

Upcoming Meetings 2010

26.-29. May	PSP2010 International Meeting on Proline-Specific Cleavage and Oxopropyl Formation – Functions and Therapeutic Strategies	http://www.probiodrug.de/index.php?id=72
03.-07. July	7th FENS Forum of European Neuroscience Amsterdam, The Netherlands, EU	http://fens2010.neurosciences.asso.fr/index.html
10.-15. July	ICAD Alzheimer s Association – International Conference on Alzheimer s Disease Honolulu, Hawaii - USA	http://www.alz.org/icad/2010_icad.asp

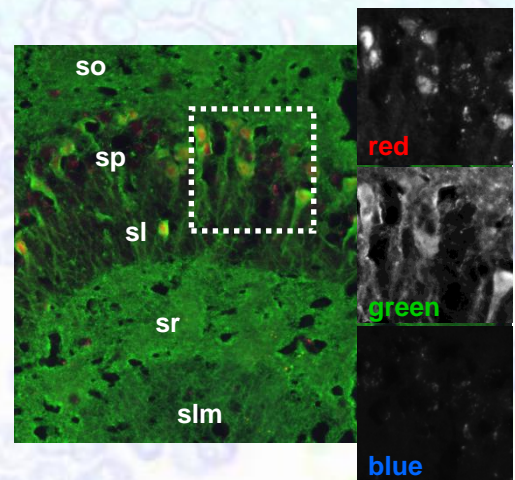
Several animal models for **Parkinson's Disease (PD)** are kept at the JSW Life Sciences animal facility:

Human **α -synuclein transgenic mice** driven by either human PDGF- β promoter (known as the D-line; Masliah et al. 2000, Science) or by murine Thy-1 promoter (Kahle et al. 2000, J Neurosci). After stringent and extensive testing of a multitude of antibodies against several intracellular epitopes, we have the **expertise to detect different forms of α -synuclein**, namely human, murine, and phosphorylated fractions; using pan-specific antibodies against N-terminal epitopes, we can also visualize the entire expression of **all synuclein isoforms** (α , β , γ ; human and murine).



Double-immunofluorescence against **synuclein in the hippocampal CA3** region of hPDGF- β α -synuclein transgenic mice; **human α -synuclein** is green, **pan-synuclein** is red, endogenous tissue autofluorescence is shown in blue. Yellow color indicates colabeling of human-specific and pan-species-specific antibodies. Note that mossy fiber terminals in stratum lucidum (sl) appear only in red, indicating expression of endogenous murine protein.

Double-immunofluorescence against α -synuclein in transgenic mice; **human α -synuclein** is green, phosphorylated human α -synuclein is red, autofluorescence is blue. Note that **phospho- α -synuclein** is restricted to a subset of somata in CA3, but totally absent from neuropil. Human α -synuclein is highly expressed in stratum oriens (so) and radiatum (sr).



Besides transgenic mice, we also offer other models for PD:

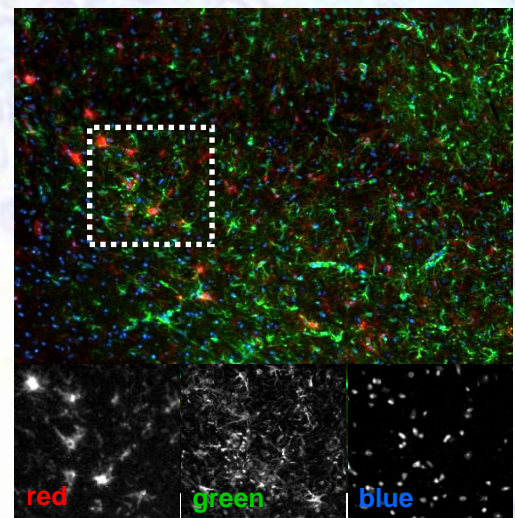
The systemic application of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (**MPTP**) induces loss of tegmental dopaminergic neurons. MPTP is metabolized to MPP+, taken up via the dopamine transporter, and increases the production of reactive oxygen species in target neurons by interfering with the electron transport in mitochondria, resulting in damage and eventually loss of cells. We are highly experienced in both acute and chronic models of MPTP treatments and the analysis of their effects.

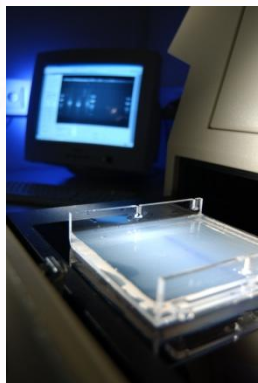
Each **analysis** will be **customized** to the sponsor's needs and requirements. It may comprise for example the histological quantification of the size of ventricles or brain areas, plaque-load, and cell numbers, using immunohistochemistry and other staining procedures, e.g. Nissl, silver stains, HE. With **multi-channel immunofluorescence** we can analyze the cellular and subcellular distribution of proteins and other molecules of interest.

Histological results can be correlated with **molecular data**, e.g. from quantitative real-time RT-PCR and Western blotting, and with **behavioral analysis**. Therefore, the experience and the expertise of our qualified scientists guarantee **high quality comprehensive sets of data** for the preclinical evaluation of the efficacy and toxicity of new pharmacological compounds.

We are proud to announce that just recently **JSW Lifesciences** has again successfully passed the **GLP certification** process. We are now approved for another period of **world class contract research**.

Triple-fluorescence image of **glial activation** by MPTP treatment in the **substantia nigra** of mouse midbrain. Immunoreactivity against **CD11b** is shown in red, **GFAP** in green, nuclei are labelled in blue with **DAPI**.





Everything we do is guided by the principle of responsible care – to serve our clients, protect our employees, the environment and society at large.

Quality

Offering outstanding services requires not only comprehensive state-of-the-art technology in the laboratory. We also pay **special attention** to the **selection** and **training** of **our employees**. All of our employees possess **extensive personal know-how**, working closely with many different departments, including the research and development, process and application technology, production, and environmental protection departments, as well as with governmental agencies.

Another essential factor for the **quality of our services** is the fact that we have a low personnel fluctuation rate. Consequently, the years of experience our colleagues remain available to our customers.

GLP

As an **experienced service provider**, we are aware that economy, reliability, proximity to customers and **high quality** all play an essential role. We have been GLP-certified by the Austrian Federal Office for Safety in Health Care (Austrian Medicines and Medical Devices Agency) for more than 10 years.

Compliance with GLP methods in laboratory experiments is guaranteed through regular audits by our internal quality assurance unit. The Grambach site has an **integrated management system**. We participate in regularly scheduled inter laboratory round-robin tests to further ensure the high quality of our analyses and experiments.



Your benefits of GLP

GLP compliant status means that **all analytical studies are carried out by trained staff**, using calibrated instruments, validated methods, with the highest attention to detail, and following documents acceptable to regulatory authorities around the world.

- **Enhances credibility** of data and reporting
- **Promotes acceptance** of data internationally
- **Reduces technical barriers** to trade
- **Better traceability** and **reproducibility of data**