

## SUPPLEMENTAL MATERIAL

Luk et al, <http://www.jem.org/cgi/content/full/jem.20112457/DC1>

|                      | 30 days p.i. |     |     |    | 90 days p.i. |     |     |    | Aged (>8M) |       |
|----------------------|--------------|-----|-----|----|--------------|-----|-----|----|------------|-------|
|                      | Lysate       | PFF | PBS | KO | Lysate       | PFF | PBS | KO | Symp       | Asymp |
| Olfactory bulb       | -            | -   | -   | -  | +            | +   | -   | -  | -          | -     |
| Frontal cortex       | -            | +   | -   | -  | ++           | +++ | -   | -  | -          | -     |
| Motor cortex         | +            | +   | -   | -  | ++           | ++  | -   | -  | +          | -     |
| Striatum             | +            | +   | -   | -  | ++           | ++  | -   | -  | +          | -     |
| Corpus callosum      | +            | +   | -   | -  | ++           | ++  | -   | -  | -          | -     |
| Anterior commissure  | +            | +   | -   | -  | +            | +   | -   | -  | -          | -     |
| Somatosensory cortex | +            | +   | -   | -  | +++          | +++ | -   | -  | +          | -     |
| Septum               | -            | -   | -   | -  | +            | +   | -   | -  | -          | -     |
| Hippocampus          | -            | -   | -   | -  | +            | +   | -   | -  | -          | -     |
| Internal capsule     | +            | +   | -   | -  | ++           | ++  | -   | -  | -          | -     |
| Thalamus             | +            | +   | -   | -  | +++          | +++ | -   | -  | ++         | -     |
| Hypothalamus         | -            | -   | -   | -  | +++          | +++ | -   | -  | +          | -     |
| Amygdala             | -            | -   | -   | -  | +            | +   | -   | -  | +          | -     |
| Zona incerta         | +            | +   | -   | -  | ++           | ++  | -   | -  | +          | -     |
| Cerebral peduncle    | -            | -   | -   | -  | ++           | ++  | -   | -  | +          | -     |
| Entorhinal cortex    | +            | -   | -   | -  | ++           | ++  | -   | -  | +          | -     |
| Substantia nigra     | -            | -   | -   | -  | ++           | ++  | -   | -  | -          | -     |
| Visual cortex        | +            | +   | -   | -  | +            | +   | -   | -  | +          | -     |
| Periaqueductal grey  | +            | +   | -   | -  | +++          | +++ | -   | -  | +++        | -     |
| Cerebellum           | -            | -   | -   | -  | +            | +   | -   | -  | -          | -     |
| Pons                 | -            | +   | -   | -  | +++          | +++ | -   | -  | ++         | -     |
| Medulla              | -            | +   | -   | -  | +++          | +++ | -   | -  | ++         | -     |
| Trigeminal nerve     | -            | -   | -   | -  | ++           | ++  | -   | -  | -          | -     |
| Spinal cord          | -            | -   | -   | -  | ++           | ++  | -   | -  | ++         | -     |

**Figure S1. Summary of the distribution of hyperphosphorylated  $\alpha$ -Syn (pSyn) pathology.** Analyses of various brain regions of M83 animals following intracerebral inoculation with symptomatic M83 brain lysate ( $n = 14$ ),  $\alpha$ -Syn<sup>1–120</sup>Myc PFF ( $n = 12$ ), or PBS ( $n = 11$ ). Data for  $\alpha$ -Syn KO animals ( $n = 5$ ) and noninjected animals with (Sym,  $n = 5$ ) or without (Asym,  $n = 3$ ) neurological symptoms are also shown for comparison. Pathology was assessed using a semiquantitative scale that ranged from absent (-), mild (+), moderate (++) to severe (+++).

**Table S1.** Antibodies used in this study

| Antibody                                      | Source/reference                              | Host | Dilution (IHC) | Antigen retrieval <sup>a</sup> | Dilution (WB) |
|---|---|------|----------------|--------------------------------|---------------|
| <b><math>\alpha</math>-Syn</b>                |   |      |                |                                |               |
| Syn 202                                       | Duda et al., 2002                             | Mse  | -              | -                              | 1:2,000       |
| Syn 211                                       | Giasson et al., 2000, 2002                    | Mse  | -              | -                              | 1:2,000       |
| Syn 303                                       | Giasson et al., 2003                          | Mse  | 1:7,000        | None                           | 1:2,000       |
| Syn 506                                       | Giasson et al., 2000; Waxman et al., 2008     | Mse  | 1:20,000       | None                           | -             |
| SNL-4   | Giasson et al., 2002                          | Rb   | 1:10,000       | Formic acid                    | 1:2,000       |
| <b>Phosphorylated <math>\alpha</math>-Syn</b> |   |      |                |                                |               |
| pSyn 6.2                                      | This study                                    | Rb   | 1:5,000        | None                           | -             |
| Syn <sup>PSer129</sup>                        | Waxman and Giasson, 2008                      | Mse  | 1:10,000       | None                           | 1:2,000       |
| <b>Murine <math>\alpha</math>-Syn</b>         |   |      |                |                                |               |
| mSyn262                                       | This study                                    | Rb   | -              | -                              | 1:250         |
| <b><math>\beta</math>-Syn</b>                 |   |      |                |                                |               |
| Syn 214                                       | Tu et al., 1998                               | Mse  | -              | -                              | 1:100         |
| <b>CNS markers</b>                            |   |      |                |                                |               |
| Microtubule-associated protein 2 (MAP2)       | Center for Neurodegenerative Disease Research | Mse  | 1:10,000       | None                           | -             |
| NeuN/FOX3                                     | Millipore                                     | Rat  | 1:1,000        | -                              | -             |
| Tyrosine hydroxylase                          | Millipore                                     | Rb   | 1:1,000        | Formic acid                    | -             |
| Iba-1   | Wako  | Rb   | 1:1,000        | None                           | -             |
| Glial fibrillary acidic protein (GFAP)        | Dako  | Rb   | 1:20,000       | None                           | -             |
| <b>Miscellaneous</b>                          |   |      |                |                                |               |
| Myc (9E10)                                    | Santa Cruz                                    | Mse  | 1:5,000        | None                           | -             |
| Ubiquitin (1510)                              | Millipore                                     | Mse  | 1:25,000       | Formic acid                    | -             |

<sup>a</sup>Formic acid treatment: 88% formic acid for 5 min at room temperature.

## REFERENCES

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