## **Supplementary Material**

## Prospective role of PAK6 and 14-3-3y as biomarkers for Parkinson's disease

**Supplementary Figure 1.** Schematic representation of the functional relation between G2019S LRRK2/PAK6 and 14-3-3γ. In a pathological context (LRRK2 G2019S) both PAK6 and 14-3-3γ dynamically interact with LRRK2. This results in an increased kinase activity of LRRK2 and consequent pathological phenotype (a). In the presence of active PAK6, 14-3-3γ is phosphorylated at Ser 59, with consequent dissociation of the monomers. This results in a detachment of 14-3-3γ from G2019S LRRK2, finally preventing/reducing the pathological phenotype.

