

P30744

Parkinson's Disease (PD) is a neurological disorder that affects to the central nervous system. The symptoms appear gradually and range from tremor or bradykinesia to muscle rigidity.

Among the hallmarks that distinguish the pathology of PD, the loss of dopaminergic neurons in the substantia nigra and the reduction of dopamine levels in the striatum are the most characteristic. Yet other areas of the brain may also be affected.

The molecular mechanism that produces the loss of dopaminergic neurons remains misunderstood.

At the cellular level, mitochondrial stress and defective mitophagy related with the dysregulation of PINK1 or PARKIN signaling, can cause neurodegeneration and neuroinflammation.



# PARKINSON'S DISEASE

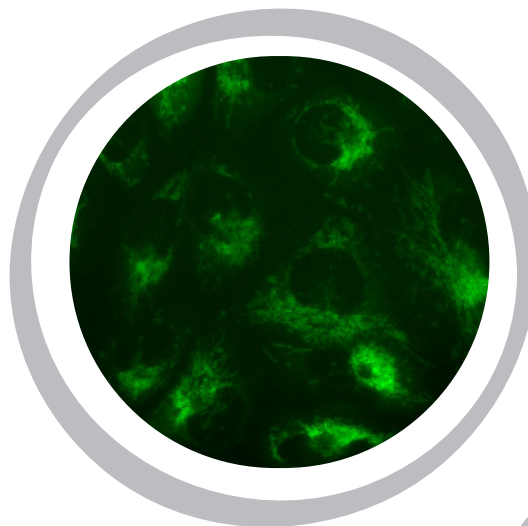
## GREEN FLUORESCENT PINK1 CELL LINE

### Background

**PTEN-induced kinase 1 (PINK1)** is a mitochondrially localized Ser/Thr protein kinase. Once translated in the cytoplasm, PINK1 is directed to the mitochondria where it is processed and cleaved by mitochondrial proteases.

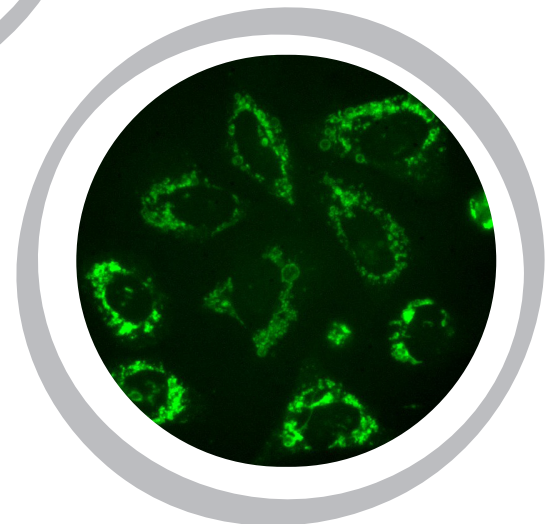
PINK1 together with Parkin play a central role in the regulation of mitochondrial homeostasis by selectively destroying damaged organelles in a process called mitophagy.

PINK1 and Parkin mutations have been related to early-onset Parkinson's disease. Indeed, mutations in these genes are considered to be the second most common cause of early-onset Parkinson's disease.



Control

CCCP



**Product Name:** tGFP-PINK1 cell line

**Reference Number:** P30744

**Prot. Official Full Name:** PTEN-induced kinase 1 (PINK1)

**Host Cell:** U2OS

**Resistance:** G418

**Quantity:** > 3 × 10<sup>6</sup> cells / vial

**Storage:** Liquid Nitrogen