

## **Data Sheet**

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 : S-181

 Cat. No.
 : PC-73111

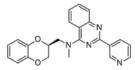
 CAS No.
 : 2270984-21-7

 Molecular Formula
 : C23H20N4O2

 Molecular Weight
 : 384.439

 Target
 : Other Targets

 Solubility
 : 10 mM in DMSO



## **Biological Activity**

S-181 (S 181) is a specific small-molecule activator (modulator) of  $\beta$ -glucocerebrosidase (GCase) with AC50 of 1.49 uM and a maximum activation of 780%.

S-181 displays no effect in vitro enzyme activity of the lysosomal enzymes acid  $\alpha$ -glucosidase and  $\alpha$ -galactosidase A.

S-181 (5 to 25 uM) is sufficient to increase wild-type GCase activity in iPSC-derived dopaminergic neurons.

S-181 partially rescues pathogenic phenotypes in GBA-PD iPSC-derived dopaminergic neurons.

S-181 lowers oxidized dopamine and  $\alpha$ -synuclein in non-GBA1-linked PD patient iPSC-derived dopaminergic neurons.

S-181 lowers lipid substrate and  $\alpha$ -synuclein accumulation in wild-type (Gba1+/+) and Gba1D409V/+ mutant mice.

## References

Burbulla LF, et al. *Sci Transl Med.* 2019 Oct 16;11(514). pii: eaau6870.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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