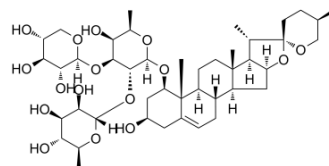


## Ophiopogonin D

|                           |   |
|---------------------------|---|
| <b>Cat. No.:</b>          | HY-N0515  |
| <b>CAS No.:</b>           | 945619-74-9   |
| <b>Molecular Formula:</b> | C <sub>44</sub> H <sub>70</sub> O <sub>16</sub>   |
| <b>Molecular Weight:</b>  | 855.02  |
| <b>Target:</b>            | PPAR; NF-κB; Calcium Channel  |
| <b>Pathway:</b>           | Cell Cycle/DNA Damage; NF-κB; Membrane Transporter/Ion Channel; Neuronal Signaling        |
| <b>Storage:</b>           | Please store the product under the recommended conditions in the Certificate of Analysis. |



### BIOLOGICAL ACTIVITY

#### Description

Ophiopogonin D, isolated from the tubers of *Ophiopogon japonicus*, is a rare naturally occurring C<sub>29</sub> steroidal glycoside<sup>[1]</sup>. Ophiopogonin D is a CYP2J3 inducer that significantly inhibits Ang II induced NF-κB nuclear translocation, IκBα down-regulation, intracellular Ca<sup>2+</sup> overload and activation of pro-inflammatory cytokines by increasing the expression of CYP2J2/EETs and PPARα in human umbilical vein endothelial cells (HUVECs). Ophiopogonin D has been used to treat inflammatory and cardiovascular diseases for thousands of years<sup>[2]</sup>.

#### IC<sub>50</sub> & Target

|       |       |                  |
|-------|-------|------------------|
| PPARα | NF-κB | Ca <sup>2+</sup> |
|-------|-------|------------------|

### REFERENCES

- [1]. Wang L, et al. Homo-aro-cholestane, furostane and spirostane saponins from the tubers of *Ophiopogon japonicus*. *Phytochemistry*. 2017 Apr;136:125-132.
- [2]. Huang X, et al. Ophiopogonin D and EETs ameliorate Ang II-induced inflammatory responses via activating PPARα in HUVECs. *Biochem Biophys Res Commun*. 2017 Aug 19;490(2):123-133.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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