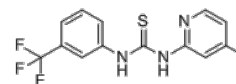


**Product Name** : GPR101 agonist AA-14  
**Cat. No.** : PC-21343  
**CAS No.** : 723740-38-3  
**Molecular Formula** : C<sub>14</sub>H<sub>12</sub>F<sub>3</sub>N<sub>3</sub>S  
**Molecular Weight** : 311.33  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



CAS: 723740-38-3

## Biological Activity

GPR101 agonist AA-14 is a specific small molecule agonist of **GPR101** with EC<sub>50</sub> of 0.37 μM, 0.88 μM and 2.14 μM in activating Gs, Gq or β-arrestin2 assays respectively.

AA-14 selectively activated the Gs and Gq pathways downstream of GPR101, but not in HEK293 cells expressing any of the other tested receptors.

AA-14 partially restores the functions of GH/IGF-1 axis.

AA-14 (0.1 mg/kg per day) exerts rejuvenating effects through activating GPR101 in 8-week-old mice, which are abrogated in Gpr101-deficient mice.

AA-14 stimulates hormone synthesis in the pituitary of aged mice.

GPR101 is an orphan G protein-coupled receptor actively participating in energy homeostasis.

## References

Yang Z, et al. *Nat Chem Biol*. 2023 Nov 9. doi: 10.1038/s41589-023-01456-6.

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

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