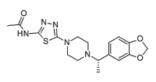


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## **Data Sheet**

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	ASN90
Cat. No.	:	PC-73139
CAS No.	:	1884154-02-2
Molecular Formula	:	C <sub>17</sub> H <sub>21</sub> N <sub>5</sub> O <sub>3</sub> S
Molecular Weight	:	375.447
Target	:	Other Targets
Solubility	:	10 mM in DMSO



## **Biological Activity**

ASN90 is a potent, selective, substrate-competitive **O-GlcNAcase** (OGA) inhibitor with IC50 of 10.2 nM. ASN90 does not inhibit hexosaminidase (Hex).

ASN90 induced protein O-GlcNAcylation in plated human and rodent PBMC with similar potencies (EC50 of 209 and 489 nM for human and rodent PBMC, respectively).

ASN90 is chemically distinct from carbohydrate-type substrate mimetic OGA inhibitors such as Thiamet G and MK-8719. ASN90 binds to the OGA enzyme in the living rat brain and robustly elevates the O-GlcNAcylation of brain proteins, including both tau and  $\alpha$ -synuclein, in vivo.

ASN90 exhibited therapeutic efficacy in preclinical models of both tau and  $\alpha$ -synuclein pathology.

## References

Permanne B, et al. ACS Chem Neurosci. doi: 10.1021/acschemneuro.2c00057.

Caution: Product has not been fully validated for medical applications. Lab Use Only! E-mail: tech@probechem.com