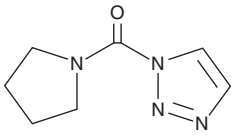
PRODUCT INFORMATION

AA26-8

Item No. 36937

CAS Registry No.:	1312782-34-5
Formal Name:	1-pyrrolidinyl-1H-1,2,3-triazol-1-yl-methanone
Synonyms:	AA26-9, KK007-N1
MF:	$C_7H_{10}N_4O$
FW:	166.2
Purity:	≥98%
UV/Vis.:	λ_{max}: 218 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

AA26-8 is supplied as a solid. A stock solution may be made by dissolving the AA26-8 in the solvent of choice, which should be purged with an inert gas. AA26-8 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of AA26-8 in these solvents is approximately 3, 5, and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of AA26-8 can be prepared by directly dissolving the solid in aqueous buffers. The solubility of AA26-8 in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

AA26-8 is a pan-serine hydrolase inhibitor.[1] It inhibits acylaminoacyl-peptide hydrolase (APEH), platelet-activating factor acetylhydrolase 2 (PAF-AH2), α/β hydrolase domain-containing protein 11 (ABHD11), lysophospholipase 1 (LYPLA1), fatty acid amide hydrolase (FAAH), and neutral cholesterol ester hydrolase 1 (NCEH1) when used at a concentration of 1 µM. AA26-8 (10 µM) also inhibits the interaction of the α/β hydrolase Dwarf14 (D14) and a negative regulator of its signaling, D53, induced by the plant growth regulator GR24 (Item No. 13210) in a yeast two-hybrid assay.[2]

References

1. Adibekian, A., Martin, B.R., Wang, C., *et al.* Click-generated triazole ureas as ultrapotent *in vivo*-active serine hydrolase inhibitors. *Nat. Chem. Biol.* **7(7)**, 469-478 (2011).
2. Nakamura, H., Hirabayashi, K., Miyakawa, T., *et al.* Triazole ureas covalently bind to strigolactone receptor and antagonize strigolactone responses. *Mol. Plant* **12(1)**, 44-58 (2019).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM