

## Product Data Sheet

Product Name: VU6052254

Cat. No.: GC79315

### Chemical Properties

Cas. No. 3035701-02-8

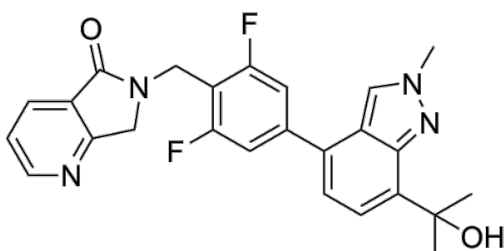
Formula  $C_{25}H_{22}F_2N_4O_2$  M.Wt 448.46

Solubility DMSO: 33.33 mg/mL (74.32 mM; Storage Store at -20°C  
Need ultrasonic)

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



### Background

VU6052254, a derivative of VU0467319, is a selective, potent, orally active and brain-penetrant muscarinic M1 acetylcholine receptor (mAChR1) positive allosteric modulator with an EC<sub>50</sub> of 59 nM. VU6052254 has no activity on the M2-5 receptor (EC<sub>50</sub> > 30 μM). VU6052254 can improve memory recognition ability and reverse the cognitive impairment induced by Scopolamine with minimum effective dose both of 1 mg/kg. VU6052254 can be used for the research of neurological

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

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disease, such as Alzheimer's disease <sup>[1]</sup>.

### References:

[1]. Engers JL, et al. Discovery of VU6052254: A Novel, Potent M1 Positive Allosteric Modulator. ACS Chem Neurosci. 2025 Dec 17;16(24):4741-4750.

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