



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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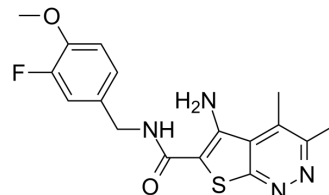
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## VU0467485

|                    |                                                                                               |
|--------------------|-----------------------------------------------------------------------------------------------|
| Cat. No.:          | HY-120184                                                                                     |
| CAS No.:           | 1451994-10-7                                                                                  |
| Molecular Formula: | C <sub>17</sub> H <sub>17</sub> FN <sub>4</sub> O <sub>2</sub> S                              |
| Molecular Weight:  | 360.41                                                                                        |
| Target:            | mAChR                                                                                         |
| Pathway:           | GPCR/G Protein; Neuronal Signaling                                                            |
| Storage:           | <div>Powder -20°C 3 years</div> <div>In solvent -80°C 6 months</div> <div>-20°C 1 month</div> |



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 20 mg/mL (55.49 mM; ultrasonic and warming and heat to 60°C)

|                              | Solvent<br>Concentration | Mass | 1 mg      | 5 mg       | 10 mg      |
|------------------------------|--------------------------|------|-----------|------------|------------|
|                              |                          |      |           |            |            |
| Preparing<br>Stock Solutions | 1 mM                     |      | 2.7746 mL | 13.8731 mL | 27.7462 mL |
|                              | 5 mM                     |      | 0.5549 mL | 2.7746 mL  | 5.5492 mL  |
|                              | 10 mM                    |      | 0.2775 mL | 1.3873 mL  | 2.7746 mL  |

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

VU0467485 (AZ13713945) is a potent, selective, and orally bioavailable muscarinic acetylcholine receptor 4 (M4) positive allosteric modulator (PAM). VU0467485 (AZ13713945) potentiates activity of ACh at M4 with EC<sub>50</sub>s of 26.6 nM and 78.8 nM at rat and human M4 receptors, respectively. VU0467485 (AZ13713945) shows selectivity for M4 over human and rat M1/2/3/5. VU0467485 (AZ13713945) displays moderate to high CNS penetration. VU0467485 (AZ13713945) has antipsychotic-like activity<sup>[1]</sup>.

#### In Vivo

VU0467485 (1-10 mg/kg; p.o.) has antipsychotic-like activity in an amphetamine-induced hyperlocomotion (AHL) rat model<sup>[1]</sup>.

VU0467485 (3 mg/kg; p.o.) treatment displays that the C<sub>max</sub>, AUC<sub>0-inf</sub> and elimination t<sub>1/2</sub> were 1.2 μM, 3.8 μM•h and 4.2 hours, respectively<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

|               |                                                                                    |
|---------------|------------------------------------------------------------------------------------|
| Animal Model: | Sprague Dawley rats (amphetamine-induced hyperlocomotion rat model) <sup>[1]</sup> |
| Dosage:       | 1, 3, 10 mg/kg                                                                     |

|                 |                                                                                                                                 |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------|
| Administration: | Oral administration                                                                                                             |
| Result:         | Dose-dependently reverses AHL.                                                                                                  |
| Animal Model:   | Male sprague Dawley rats <sup>[1]</sup>                                                                                         |
| Dosage:         | Oral administration (Pharmacokinetic Analysis)                                                                                  |
| Administration: | 3 mg/kg                                                                                                                         |
| Result:         | The C <sub>max</sub> , AUC <sub>0-inf</sub> and elimination t <sub>1/2</sub> were 1.2 μM, 3.8 μM•h and 4.2 hours, respectively. |

## REFERENCES

[1]. Wood MR, et al. Discovery of VU0467485/AZ13713945: An M4 PAM Evaluated as a Preclinical Candidate for the Treatment of Schizophrenia. ACS Med Chem Lett. 2016 Dec 16;8(2):233-238.

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

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