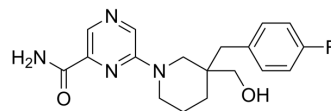


## rTRD01

<b>Cat. No.:</b>	HY-153898		
<b>CAS No.:</b>	1332175-56-0		
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>21</sub> N <sub>4</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	344.38		
<b>Target:</b>	Others		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 250 mg/mL (725.94 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
<b>1 mM</b>	2.9038 mL	14.5188 mL	29.0377 mL
<b>5 mM</b>	0.5808 mL	2.9038 mL	5.8075 mL
<b>10 mM</b>	0.2904 mL	1.4519 mL	2.9038 mL

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

### BIOLOGICAL ACTIVITY

#### Description

rTRD01 is a TDP-43 ligand that binds to TDP-43's RRM1 and RRM2 domains ( $K_d=89 \mu\text{M}$  for TDP-43<sub>102-269</sub>). rTRD01 partially disrupts TDP-43's interaction with the hexanucleotide RNA repeat of the disease-linked c9orf72 gene. rTRD01 can be used for the research of neurodegenerative diseases<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

K<sub>d</sub>: 89  $\mu\text{M}$  (TDP-43<sub>102-269</sub>)<sup>[1]</sup>

### REFERENCES

[1]. François-Moutal L, et al. Small Molecule Targeting TDP-43's RNA Recognition Motifs Reduces Locomotor Defects in a Drosophila Model of Amyotrophic Lateral Sclerosis (ALS). ACS Chem Biol. 2019 Sep 20;14(9):2006-2013.

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

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