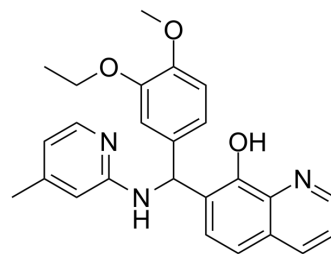


## HQ-415

<b>Cat. No.:</b>	HY-18670		
<b>CAS No.:</b>	430462-93-4		
<b>Molecular Formula:</b>	C <sub>25</sub> H <sub>25</sub> N <sub>3</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	415.48		
<b>Target:</b>	Others		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : 5.6 mg/mL (13.48 mM; Need ultrasonic and warming)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.4069 mL	12.0343 mL	24.0685 mL
	5 mM	0.4814 mL	2.4069 mL	4.8137 mL
	10 mM	0.2407 mL	1.2034 mL	2.4069 mL

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

## BIOLOGICAL ACTIVITY

### Description

HQ-415 is a class of clinically relevant bioactive metal chelators related to clioquinol. The effective concentration eliciting a EC<sub>50</sub> for HQ-415 is 15 μM. IC<sub>50</sub> value: 15 μM (EC<sub>50</sub>) in vitro: In TDP-43-expressing cells, CQ fails to synergize with HQ-161 and actually antagonizes HQ-161 rescuing activity. In contrast, despite the fact that CQ was completely inactive against TDP-43, it strongly synergized with HQ-415, decreasing the EC<sub>50</sub> from 16 to 5 μM. HQ-415 is active in the TDP-43 model, but CQ was not HQ-161 and HQ-415 are retested in dose for their ability to rescue TDP-43 toxicity. In cells expressing α-syn, HQ-161, despite being inactive on its own, synergized with HQ-415, reducing the EC<sub>50</sub> from 21 to 14 μM. HQ-415 strongly synergizes with CQ at multiple concentrations in cells expressing α-syn.

## REFERENCES

[1]. Tardiff DF, et al. Different 8-hydroxyquinolines protect models of TDP-43 protein, α-synuclein, and polyglutamine proteotoxicity through distinct mechanisms. J Biol Chem. 2012 Feb 3;287(6):4107-4120.

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

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