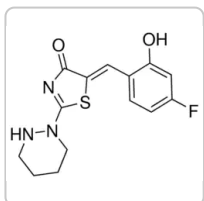


Type in Product Names, Product Numbers, or CAS Numbers to see suggestions.



All Photos (1)

Documents

[↓ SDS](#)

[🔍 COO/COA](#)

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SML1368 ▶ **Sigma-Aldrich**

CLP257

★★★★★ (0)

≥98% (HPLC)

Synonym(s):

(5Z)-5-[(4-Fluoro-2-hydroxyphenyl)methylene]-2-(tetrahydro-1-(2H)-pyridazinyl)-4(5H)-thiazolone

Empirical Formula (Hill Notation):

C₁₄H₁₄FN₃O₂S

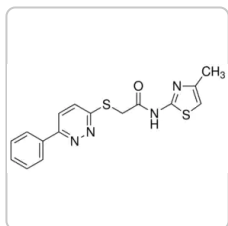
CAS Number:	1181081-71-9	Molecular Weight:	307.34
MDL number:	MFCD28166488	PubChem Substance ID:	329825822
NACRES:	NA.77		

SKU	Pack Size	Availability	Price	Quantity	
SML1368-5MG	5 MG	✔ Estimated to ship on June 17, 2022 Details...	€128.00	<input type="text" value="—"/> <input type="text" value="+"/>	i
SML1368-25MG	25 MG	✔ Available to ship on May 19, 2022 Details...	€512.00	<input type="text" value="—"/> <input type="text" value="+"/>	i

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[Add To Cart](#)

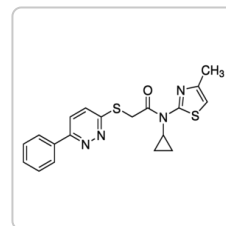
RECOMMENDED PRODUCTS



Sigma-Aldrich

V3890**VU0240551**

≥98% (HPLC)

[View Price and Availability](#)


Sigma-Aldrich

SML2333**VU0463271**

≥98% (HPLC)

[View Price and Availability](#)

PROPERTIES

Quality Level

100

assay

≥98% (HPLC)

form

powder

color

, white to yellow to light brown

solubility

DMSO: 20 mg/mL, clear

storage temp.

2-8°C

SMILES string

O=C1/C(SC(N2CCCCN2)=N1)=C/C3=CC=C(F)C=C3O

InChI	1S/C14H14FN3O2S/c15-10-4-3-9(11(19)8-10)7-12-13(20)17-14(21-12)18-6-2-1-5-16-18/h3-4,7-8,16,19H,1-2,5-6H2/b12-7-
InChI key	SKCADXVKQRCWTR-GHXNOFRVSA-N

DESCRIPTION

Application

CLP257 has been used as a K^+ - Cl^- cotransporter 2 (KCC2) enhancer in human neuron culture.

Packaging

5, 25 mg in glass bottle

Biochem/physiol Actions

CLP257 is a selective K^+ - Cl^- cotransporter KCC2 activator that restored impaired Cl^- transport in neurons with reduced KCC2 activity. Apparently, CLP257 modulates plasmalemmal KCC2 protein turnover post-translationally.

In streptozotocin treated rats, by activating a K^+ - Cl^- cotransporter 2 (KCC2) in the arginine-vasopressin neuron, CLP257 mediates γ -aminobutyric acid (GABA)ergic excitation. It is however inactive with KCC1, KCC3 and KCC4.

SAFETY INFORMATION

Pictograms

Signal Word

Warning

Hazard Statements

H302

Precautionary Statements

P301 + P312 + P330

**GHS07****Hazard Classifications**

Acute Tox. 4 Oral

Storage Class Code

13 - Non Combustible Solids

WGK

WGK 3

Flash Point(F)

Not applicable

Flash Point(C)

Not applicable

DOCUMENTATION

Certificate of Analysis | [View Sample COA](#) 

Enter Lot Number to search for Certificate of Analysis (COA).

Lot Number

e.g. 023J5431

How to enter Lot Number (COA)**Search****Certificate of Origin**

Enter Lot Number to search for Certificate of Origin (COO).

Lot Number

e.g. 023J5431

How to enter Lot Number (COO)

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PEER REVIEWED PAPERS

[Excitatory GABAergic Action and Increased Vasopressin Synthesis in Hypothalamic Magnocellular Neurosecretory Cells Underlie the High Plasma Level of Vasopressin in Diabetic Rats.](#)

Young-Beom Kim et al.

Diabetes, 67(3), 486-495 (2017-12-08)

Diabetes mellitus (DM) is associated with increased plasma levels of arginine-vasopressin (AVP), which may aggravate hyperglycemia and nephropathy. However, the mechanisms by which DM may cause the increased AVP levels are not known. Electrophysiological recordings in supraoptic nucleus (SON) slices

[Chloride extrusion enhancers as novel therapeutics for neurological diseases.](#)

Martin Gagnon et al.

Nature medicine, 19(11), 1524-1528 (2013-10-08)

The K(+)-Cl(-) cotransporter KCC2 is responsible for maintaining low Cl(-) concentration in neurons of the central nervous system (CNS), which is essential for postsynaptic inhibition through GABA(A) and glycine receptors. Although no CNS disorders have been associated with KCC2 mutations

HIV and opiates dysregulate K⁺- Cl⁻ cotransporter 2 (KCC2) to cause GABAergic dysfunction in primary human neurons and Tat-transgenic mice.

Aaron J Barbour et al.

Neurobiology of disease, 141, 104878-104878 (2020-04-29)

Approximately half of people infected with HIV (PWH) exhibit HIV-associated neuropathology (neuroHIV), even when receiving combined antiretroviral therapy. Opiate use is widespread in PWH and exacerbates neuroHIV. While neurons themselves are not infected, they incur sublethal damage and GABAergic disruption

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gauge 22, L 2 in.

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26274

SGE Needles for luer lock syringes

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