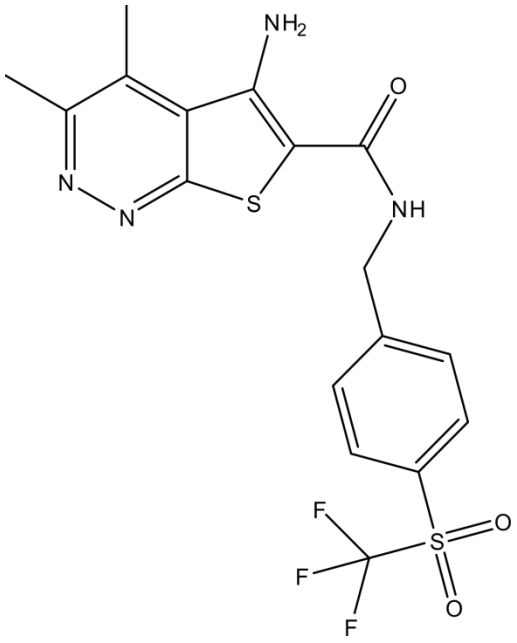
VU0467154 (RGNCY-0019)



Systematic Name:
5-amino-3,4-dimethyl-N-(4-((trifluoromethyl)sulfonyl)benzyl)thieno[2,3-c]pyridazine-6-carboxamide

Molecular Weight: 444.45

Molecular Formula:
$C_{17}H_{15}F_3N_4O_3S_2$

SMILES:
O=S(C1=CC=C(C=C1)CNC(C2=C(N)C3=C(C)C(C)=NN=C3S2)=O)(C(F)(F)F)=O

Purity: 95.11%

Batch No: R19-8-15

CAS No: 1451993-15-9

Description

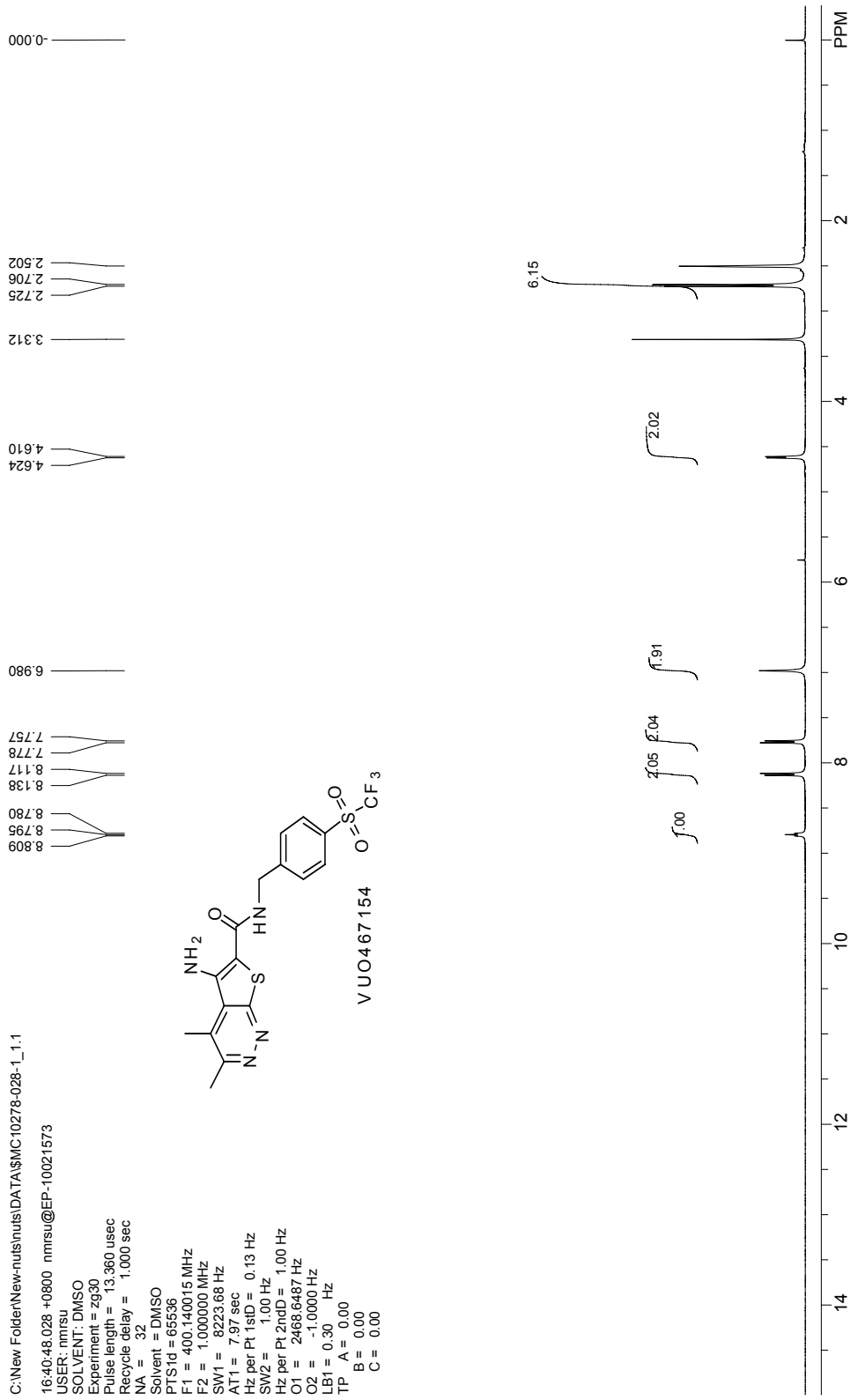
Allosteric activators of the M4 muscarinic acetylcholine receptor represent a novel approach for the treatment of psychotic symptoms associated with schizophrenia and other neuropsychiatric disorders. VU0467154 produced a robust dose-dependent reversal of MK-801-induced hyperlocomotion and deficits in preclinical models of associative learning and memory functions in wild-type mice, but failed to reverse these stimulant-induced deficits in M4 KO mice. VU0467154 also enhanced the acquisition of both contextual and cue-mediated fear conditioning when administered alone in wild-type mice.

References

Bubser, Michael et. al. "Selective Activation of M4 Muscarinic Acetylcholine Receptors Reverses MK-801-Induced Behavioral Impairments and Enhances Associative Learning in Rodents" *ACS Clinical Neuroscience* 5 (2014): 920 −942

Analytical Data:

PO Box 9242, South Yarra, VIC, 3141, Australia +61 0431091329 www.reagency.co



Data File D:\CHEM32\DATA\2015\150817\2015-08-17\AM000014.D
Sample Name: MC10278-028-1

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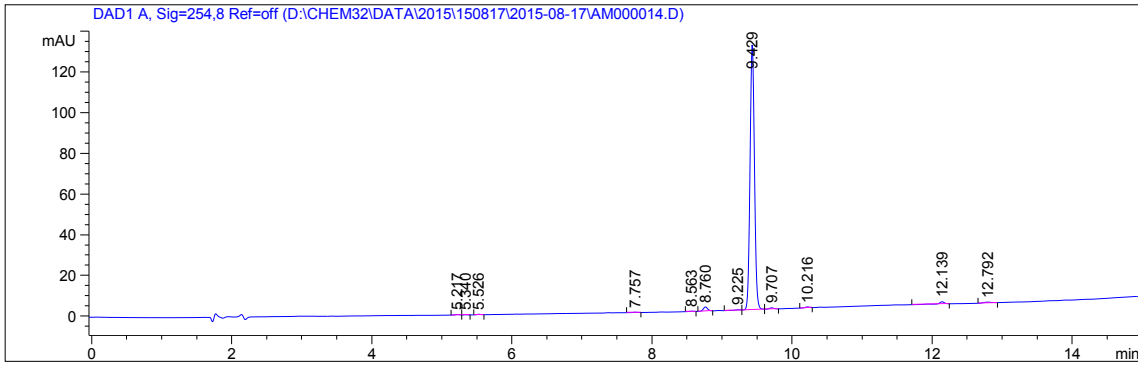
==========================================================================
Acq. Operator   : XXYAN                          Seq. Line :  14
                                                  Location : Vial 36
Injection Date  : 17-Aug-15, 14:48:37                  Inj :   1
                                                Inj Volume : 1 µl
Different Inj Volume from Sequence !     Actual Inj Volume : 0.8 µl
Acq. Method     : M-A80B20.M
Analysis Method : D:\CHEM32\METHOD\WAITING-C8.M
Last changed    : 8/17/2015 3:04:35 PM by XXYAN
                  (modified after loading)
Method Info     : Velch Ultimate  XB-C18,5um,150*4.6mm
                  A:0.1 % FA in H2O  B:0.1% FA in ACN
```




```
==========================================================================
                        Area Percent Report
==========================================================================

Sorted By             :      Signal
Multiplier            :      1.0000
Dilution              :      1.0000
Use Multiplier & Dilution Factor with ISTDs


Signal 1: DAD1 A, Sig=254,8 Ref=off
```

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	5.217	BV	0.0620	1.04182	2.64073e-1	0.1741
2	5.340	VB	0.0538	4.46832e-1	1.30896e-1	0.0747
3	5.526	BB	0.0554	9.69005e-1	2.73233e-1	0.1619
4	7.757	BB	0.0653	7.54356e-1	1.71494e-1	0.1260
5	8.563	BB	0.0656	6.61647e-1	1.55734e-1	0.1105
6	8.760	BB	0.0678	8.66934	2.03029	1.4484
7	9.225	BV	0.0679	9.83812e-1	2.12775e-1	0.1644
8	9.429	VV	0.0671	572.08856	130.69269	95.5780
9	9.707	VB	0.0730	2.78132	5.90080e-1	0.4647
10	10.216	BB	0.0679	1.81088	4.23639e-1	0.3025

Data File D:\CHEM32\DATA\2015\150817\2015-08-17\AM000014.D
Sample Name: MC10278-028-1

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
11	12.139	BB	0.0781	5.51605	1.07024	0.9216
12	12.792	BB	0.1147	2.83308	3.72627e-1	0.4733
Totals :				598.55671	136.38777	

*** End of Report ***