

# NVP-ADW742

Catalog No: tcsc0450



## Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



## Specifications

**CAS No:**

475488-23-4

**Formula:**

$C_{28}H_{31}N_5O$

**Pathway:**

Protein Tyrosine Kinase/RTK; Apoptosis

**Target:**

IGF-1R; Insulin Receptor; Apoptosis

**Form:**

White to light yellow (Solid)

**Purity / Grade:**

98.31%

**Solubility:**

10 mM in DMSO

**Storage Instruction:**

Powder -20°C for 3 years; 4°C for 2 years In solvent -80°C for 6 months; -20°C for 1 month

**Alternative Names:**

ADW742; GSK 552602A; ADW

**Observed Molecular Weight:**

453.58

**Product Description**

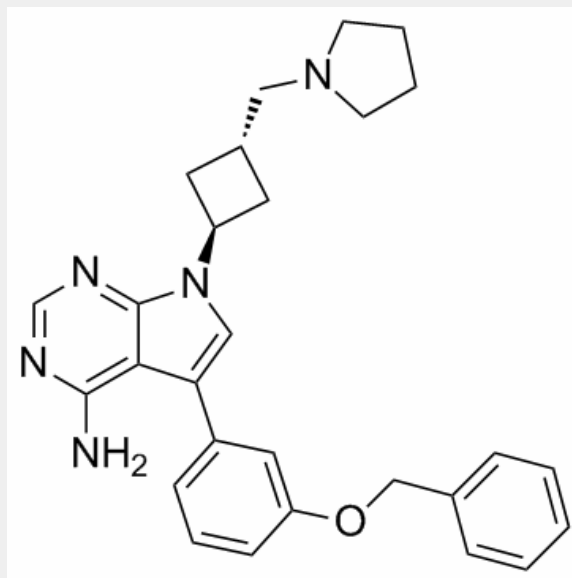
NVP-ADW742(ADW742; GSK 552602A ) is an selective IGF-1R inhibitor with IC50 of 0.17  $\mu$ M, >16-fold more potent against IGF-1R than InsR; little activity to HER2, PDGFR, VEGFR-2, Bcr-Abl and c-Kit.

IC50 value: 0.17  $\mu$ M [1]

Target: IGF-1R

in vitro: NVP-ADW742 exhibits a 6-fold greater selectivity for IGF-1R versus InsR with IC50 of 2.8  $\mu$ M; minimal inhibitory activity against c-Kit, HER1, PDGFR, VEGFR2, or Bcr-Abl p210 with IC50 greater than 5  $\mu$ M. NVP-ADW742 significantly inhibits the serum-stimulated cell proliferation in a variety of tumor cell lines in dose-dependent manner, with IC50 values of 0.1-0.5  $\mu$ M for the multiple myeloma (MM) cell lines, and the antitumor effects on MM cells can not be overcome by the co-culture with BMSCs. NVP-ADW742 also abrogates the responsiveness of tumor cells to IL-6 in the presence of serum [1]. Pretreatment of the H526 cell line with NVP-ADW742 inhibited IGF-1R signaling and growth with IC(50) values between 0.1 and 0.4 micro M [2].

in vivo: Administration of NVP-ADW742 at 10 mg/kg twice daily significantly inhibits tumor growth, prolongs survival, and enhances the antitumor effect of cytotoxic chemotherapy melphalan in the mice model of diffuse MM [1].



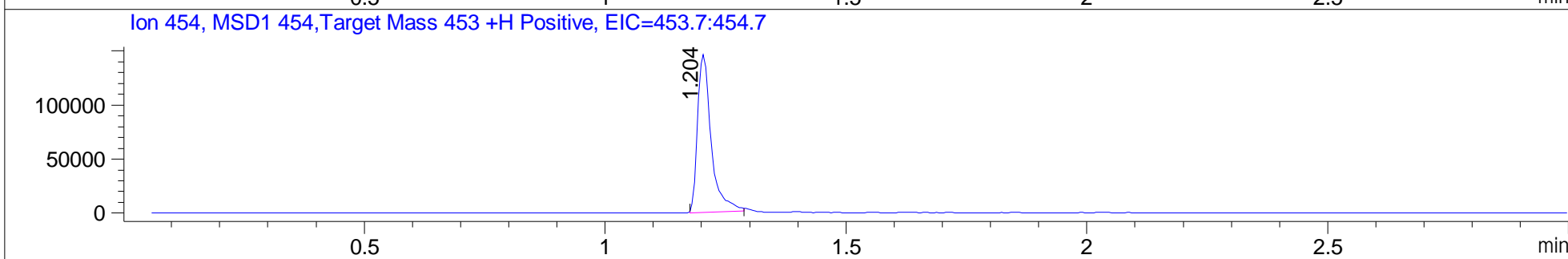
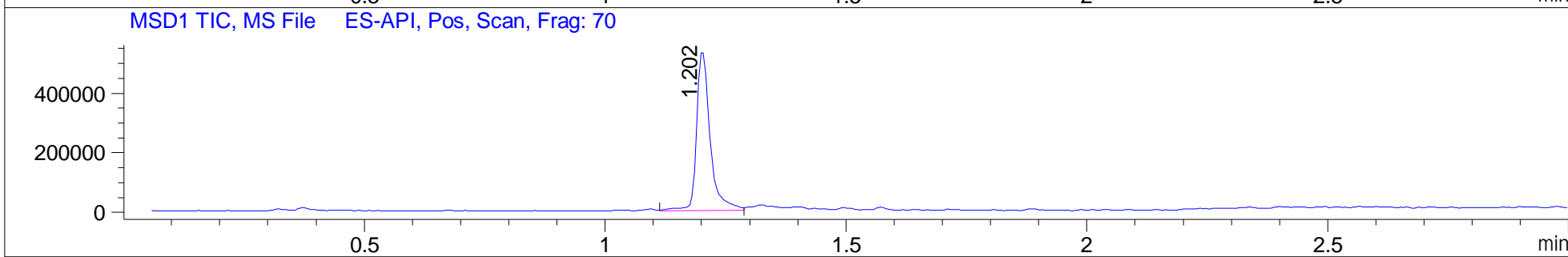
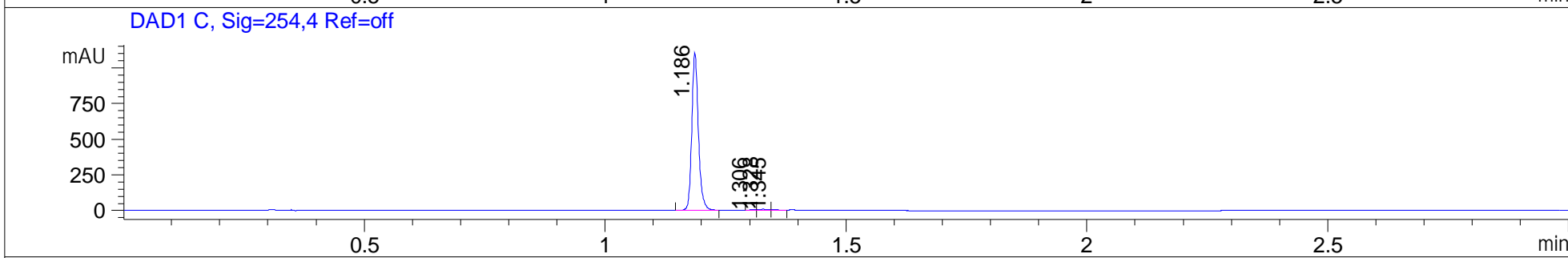
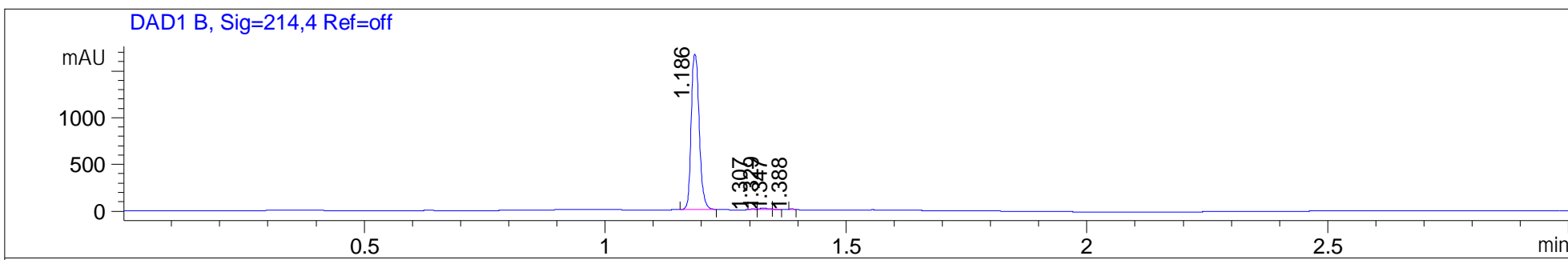
In Vitro	DMSO : 19.23 mg/mL (42.40 mM; Need ultrasonic)				
	Solvent	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	Concentration				
	1 mM		2.2047 mL	11.0234 mL	22.0468 mL
	5 mM		0.4409 mL	2.2047 mL	4.4094 mL
	10 mM		0.2205 mL	1.1023 mL	2.2047 mL

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

In Vivo	Solubility
1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline	1.92 mg/mL (4.23 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- $\beta$ -CD in saline)	1.92 mg/mL (4.23 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil	$\geq$ 1.92 mg/mL (4.23 mM); Clear solution

MS Report from Instrument: LCMS-02

File ..\DATA\2020\20201009\1121\BIZ2020-009-WLQ6.D Tgt Mass (CHM):  
 Injection Date : 9 Oct 20 9:37 pm +0800 Seq. Line : 68  
 Sample Name : BIZ2020-009-WLQ6 Location : P1-D-04  
 Acq. Operator : zyj\_1547 Inj : 1  
 Spec. Reported : MS Integration Inj Volume : 1 ul  
 Acq. Method : D:\Chem32\1\data\2020\20201009\1121\1-POS-3MIN.M  
 Analysis Method : D:\CHEM32\1\DATA\2020\20201009\1121\1-POS-3MIN.M  
 Catalog No : HY-10252  
 Method Info : Mobile Phase: A: water(0.01%TFA) B:ACN(0.01%TFA)  
 Gradient: 5% to 95%B within 1.3 min  
 Flow Rate :1.8ml/min  
 Column :SunFire C18, 4.6\*50mm,3.5um A-RP-624



Integration Results for DAD1 B, Sig=214,4 Ref=off

RetTim	Width	Area	Height	Area%	MS (+)
1.19	0.02	1930.68	1666.47	98.31	228
1.31	0.01	5.33	7.42	0.27	454
1.33	0.02	19.19	15.17	0.98	130
1.35	0.01	3.97	5.00	0.20	484
1.39	0.01	4.77	8.56	0.24	130

Integration Results for DAD1 C, Sig=254,4 Ref=off

RetTim	Width	Area	Height	Area%	MS (+)
1.19	0.02	1045.61	1107.01	98.62	228
1.31	0.01	2.97	3.59	0.28	454
1.33	0.02	8.48	6.73	0.80	130
1.34	0.02	3.20	2.86	0.30	484

Integration Results for MSD1 TIC, MS File

RetTim	Width	Area	Height	Area%	MS (+)
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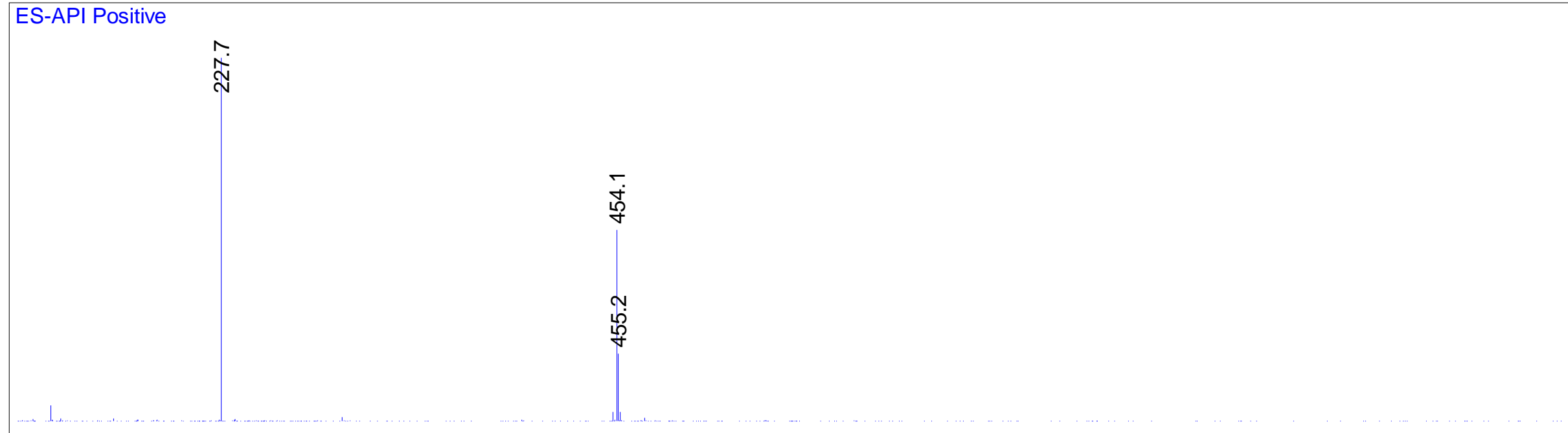
LCMS-02 10/10/2020 13:18:34 zyj\_1547

MS Report from Instrument: LCMS-02

Ret. Time: 1.20

<<<< POSITIVE SPECTRA >>>>

ES-API Positive



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!