

# GSK1838705A

## Catalog No: tcsc0695



### Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



### Specifications

**CAS No:**

1116235-97-2

**Formula:**

$C_{27}H_{29}FN_8O_3$

**Pathway:**

Protein Tyrosine Kinase/RTK;Protein Tyrosine Kinase/RTK;Protein Tyrosine Kinase/RTK

**Target:**

ALK; IGF-1R; Insulin Receptor

**Form:**

Light yellow to yellow (Solid)

**Purity / Grade:**

99.28%

**Solubility:**

DMSO :  $\geq 100$  mg/mL (187.77 mM)

**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:**

Benzamide, 2-[[2-[[1-[2-(dimethylamino)acetyl]-2,3-dihydro-5-methoxy-1H-indol-6-yl]amino]-7 H-pyrrolo[2,3-d]pyrimidin-4-yl]amino]-6-fluoro-N-methyl

**Observed Molecular Weight:**

532.57

**References**

[1]. Sabbatini P, et al. GSK1838705A inhibits the insulin-like growth factor-1 receptor and anaplastic lymphoma kinase and shows antitumor activity in experimental models of human cancers. *Mol Cancer Ther.* 2009 Oct;8(10):2811-20

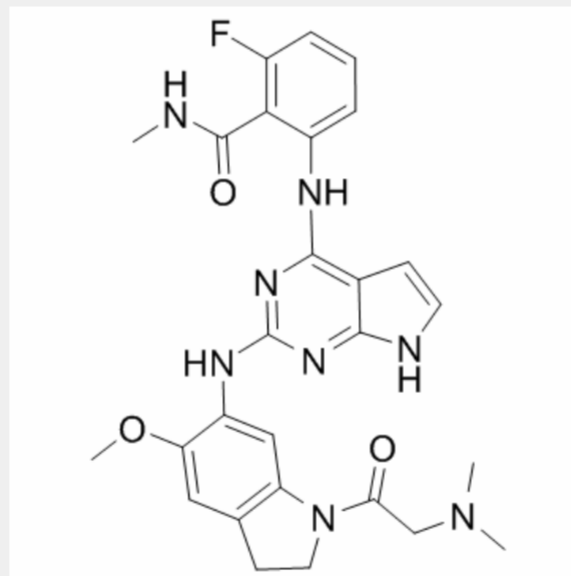
**Product Description**

GSK1838705A is a potent and reversible **IGF-IR** and the **insulin receptor** inhibitor with **IC<sub>50</sub>s** of 2.0 and 1.6 nM, respectively. It also inhibits **ALK** with an **IC<sub>50</sub>** of 0.5 nM.

IC50 & Target: IC50: 2.0 nM (IGF-IR), 1.6 nM (insulin receptor), 0.5 nM (ALK)<sup>[1]</sup>

**In Vitro:** In cellular phosphorylation assays, GSK1838705A potently inhibits IGF-IR and insulin receptor phosphorylation with IC<sub>50</sub>s of 85 and 79 nM, respectively. <sup>a</sup>ppK<sub>i</sub> values are 0.7 nM for IGF-IR and 1.1 nM for insulin receptor using the filter binding assay. GSK1838705A inhibits the proliferation in a panel of cell lines derived from solid and hematologic tumors. The EC<sub>50</sub>s of GSK1838705A range from 20 nM to >8 μM, but are [1].

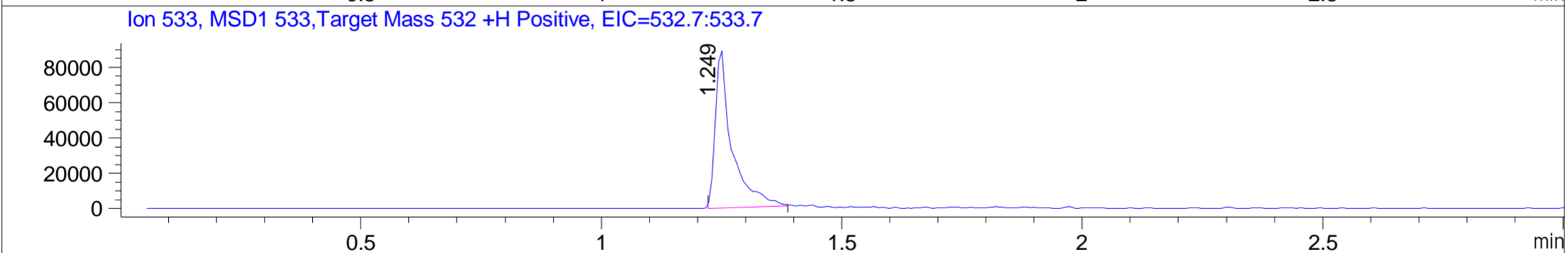
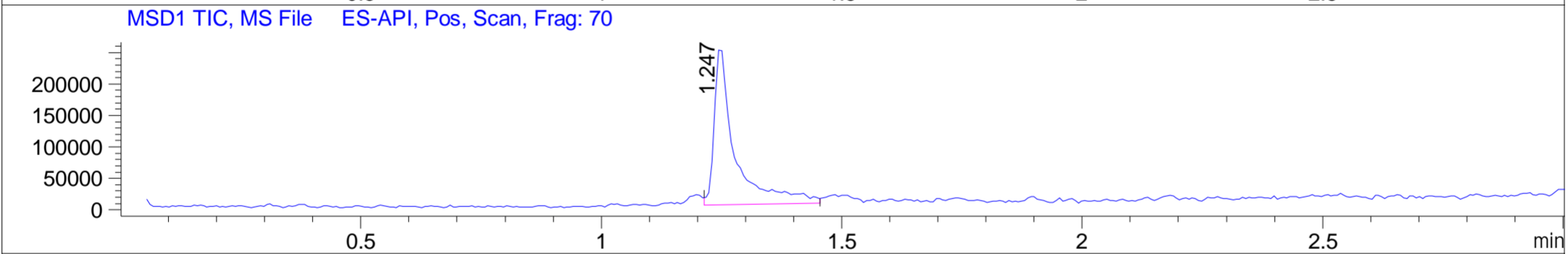
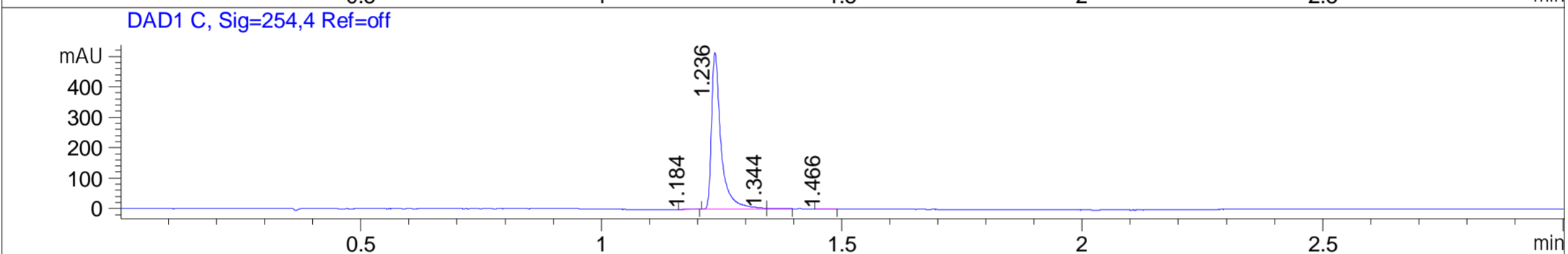
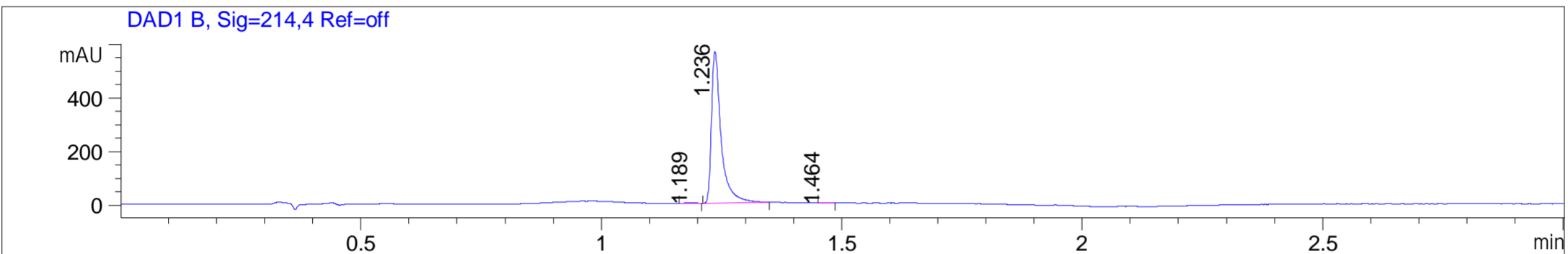
**In Vivo:** GSK1838705A shows robust antitumor activity in animal xenograft models. Tumor types likely to respond to GSK1838705A include multiple myeloma and Ewing's sarcoma, as well as ALK-driven tumors (e.g., ALCL, NSCLC, and neuroblastoma). A single oral dose of GSK1838705A at 0.1 and 0.3 mg/kg results in 35% and 65% inhibition of IGF-IR phosphorylation, respectively, whereas doses ≥1 mg/kg results in complete inhibition of ligand-induced IGF-IR phosphorylation<sup>[1]</sup>.



<b>In Vitro</b>	DMSO : ≥ 100 mg/mL (187.77 mM)					
	* "≥" means soluble, but saturation unknown.					
		<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
	<b>Preparing Stock Solutions</b>	<b>Concentration</b>				
		<b>1 mM</b>	1.8777 mL	9.3884 mL	18.7769 mL	
		<b>5 mM</b>	0.3755 mL	1.8777 mL	3.7554 mL	
		<b>10 mM</b>	0.1878 mL	0.9388 mL	1.8777 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 3 mg/mL (5.63 mM); Suspended solution; Need ultrasonic					

MS Report from Instrument: LCMS-02

File ..\DATA\2020\20200222\844\CPK2020-219-05975.D Tgt Mass (CHM):  
 Injection Date : 22 Feb 20 11:53 am +0800 Seq. Line : 39  
 Sample Name : CPK2020-219-05975 Location : P1-B-02  
 Acq. Operator : ZJ\_1432 Inj : 1  
 Spec. Reported : MS Integration Inj Volume : 1 ul  
 Acq. Method : D:\Chem32\1\data\2020\20200222\844\1-POS-3MIN.M  
 Analysis Method : D:\CHEM32\1\DATA\2020\20200222\844\1-POS-3MIN.M  
 Catalog No : HY-13020 Batch# 05975  
 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-433  
 Oven Temperature : 45□



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

RetTim	Width	Area	Height	Area%	MS (+)
1.19	0.03	3.97	2.51	0.50	308
1.24	0.02	793.64	566.58	99.28	267
1.46	0.02	1.77	1.66	0.22	446

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

RetTim	Width	Area	Height	Area%	MS (+)
1.18	0.02	1.64	1.42	0.23	308
1.24	0.02	708.47	515.25	98.87	267
1.34	0.03	4.24	2.52	0.59	533
1.47	0.03	2.20	1.46	0.31	446

Integration Results for MSD1 TIC, MS File

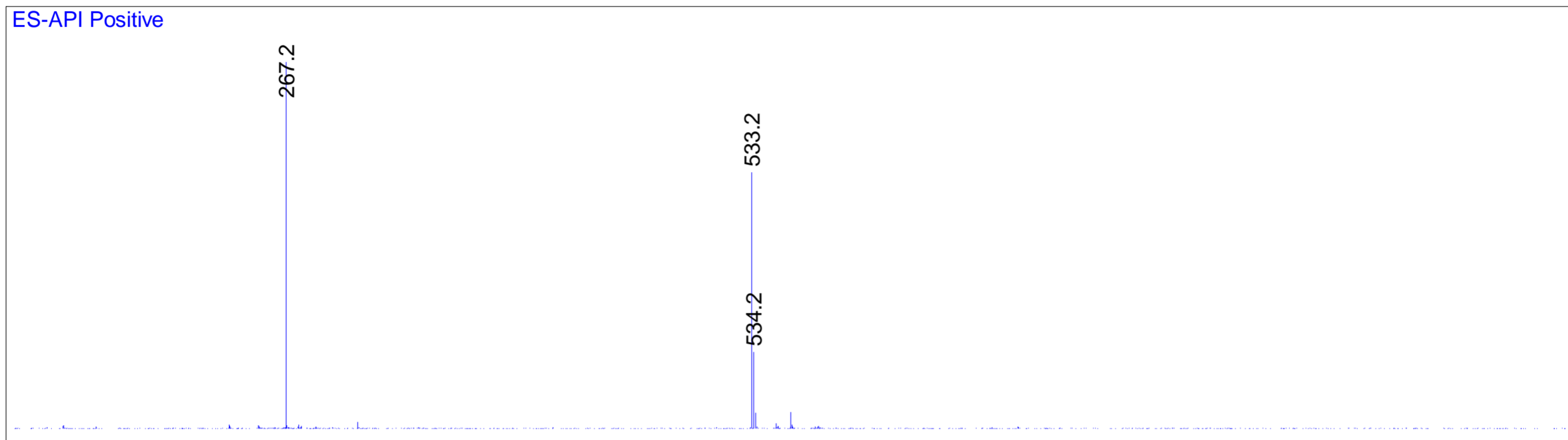
RetTim	Width	Area	Height	Area%	MS (+)
1.25	0.04	747078.06	254985.14	100.00	267

MS Report from Instrument: LCMS-02

Ret. Time: 1.25

<<<< POSITIVE SPECTRA >>>>

ES-API Positive



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