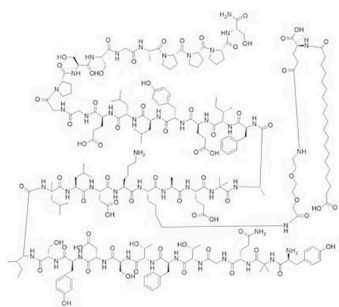
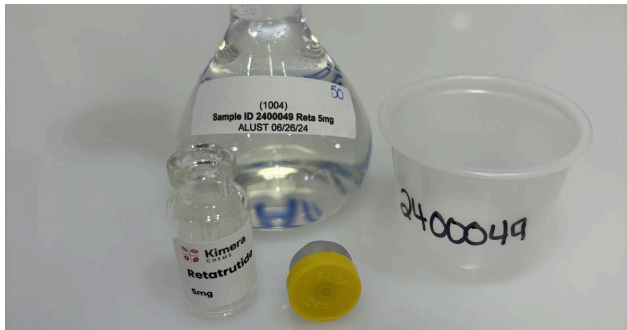


## Certificate of Analysis



Compound:	Retatrutide	Analysis Date:	26-Jun-2024
CAS:	2381089-83-2	Client:	Kimera Chems
Manufacturer:	N/A		
Client Sample ID:	Yellow Cap		
Lot:	Reta 5mg 1 vial	Test Reference:	2400049
Sample Image:			

Sample Testing	Test Method	Acceptance Criteria	Result
Appearance	Visual	White to off-white powder	Pass
Identification by Retention Time	TM-1004	0.98 - 1.02	1.00
Identification by UV Spectral Comparison to Reference Standard	TM-1004	≥ 950	1000
Vial Content (mg)	TM-1004	Per customer specification	5.51mg
Purity	TM-1004	Per customer specification	98.067%

- **Appearance:** This check is to visually verify that the sample matches the expected sample properties. If the sample appearance was different than listed, TrustPointe would reach out to the customer to verify that the correct samples were received.
- The Following Tests Are Performed Using HPLC (High Performance Liquid Chromatography):
  - **Identification by Retention Time:** This is an identification test in which the retention time of the sample is compared to the average retention time of five reference standard injections.
  - **Identification by UV Spectral Comparison to Reference Standard:** This is an identification test in which the UV spectrum of the sample is compared to the UV spectrum of the standard.
  - **Vial Content (mg):** This is the amount of the compound in the vial we tested determined by HPLC analysis.
  - **Purity:** This is purity of the sample, calculated including peaks around the compound that may be impurities.

Method & System Suitability	Test Method	Acceptance Criteria	Result
Standard + SSC Injection RSD	TM-1004	Standard Bracket Area RSD $\leq$ 2.0%	0.1%
Coelution Control (Peak Purity)	TM-1004	> 950	997

- **Standard + SSC Injection RSD:** This value shows that the HPLC system was running properly throughout your testing. The %RSD of the standard injections performed before your sample and the standard injection performed after your sample is calculated to ensure there were no system errors during your run. Although system errors such as leaks, a line running dry, air bubbles, etc. are rare, it's important that we demonstrate no errors occurred during analysis.
- **Coelution Control (Peak Purity):** This value demonstrates that there is no co-elution occurring during analysis. We receive samples from a multitude of manufacturers and each has their own recipe (stabilizers, solubilizers, fillers, etc) in their process. This measurement ensures that none of these other components interfere with the analysis. In short, this number confirms that the method is working properly and only analyzing the target compound.

All testing services provided by TrustPointe Analytics LLC are subject to our [Terms of Service](#). Learn [How To Read a COA](#).

Created By:

  
Ashlee Lust

27-Jun-2024

Reviewed By:

  
Joshua Lust

27-Jun-2024



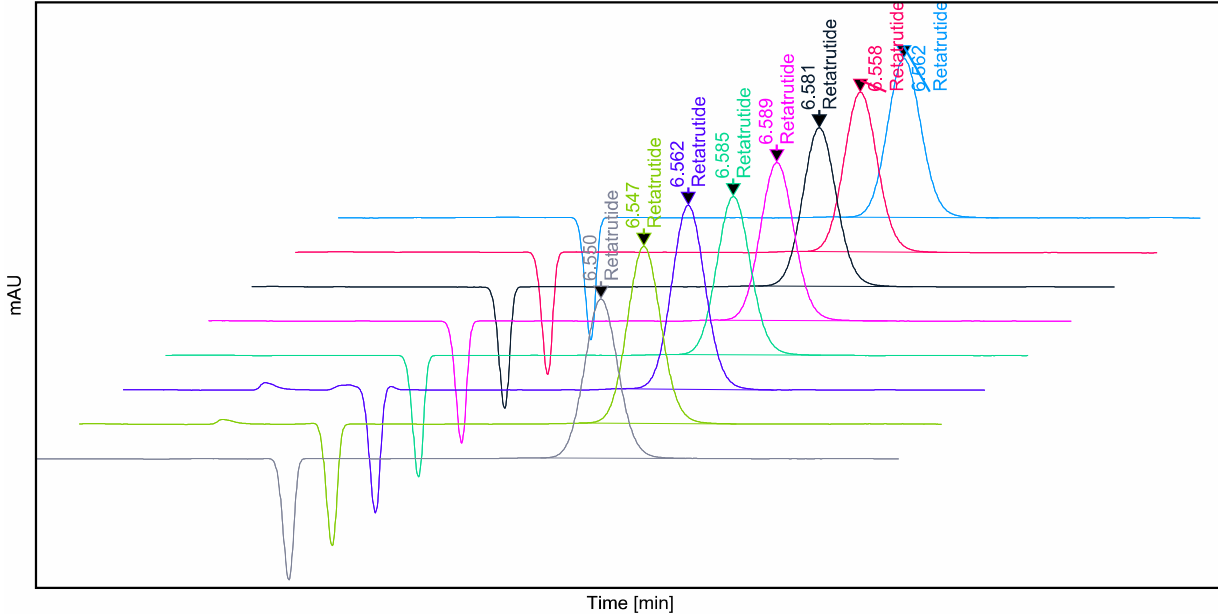
Verification Key: WNM28VDWW7PA

# Sample Potency and ID Report

Sequence Name 1004\_aml\_062624b

Sequence Acquired Date 2024-06-26 14:45:23-04:00

Retatrutide Std - 1 Sample ID 2400049  
Retatrutide Std - 2 Sample ID 2400048  
Retatrutide Std - 3 Retatrutide Std - 6 (SSC)  
Retatrutide Std - 4  
Retatrutide Std - 5



Sample Name	Name	RT	Area	Amount	Unit	UV Match Factor	Peak Purity	Peak Tail Factor
Retatrutide Std - 1	Retatrutide	6.562	603.394	95.77	%	1000	992	1.0
Retatrutide Std - 2	Retatrutide	6.558	603.235	95.75	%	999	988	1.0
Retatrutide Std - 3	Retatrutide	6.581	604.254	95.91	%	1000	980	1.1
Retatrutide Std - 4	Retatrutide	6.589	603.310	95.76	%	1000	996	1.1
Retatrutide Std - 5	Retatrutide	6.585	603.739	95.83	%	999	996	1.0
Sample ID 2400049	Retatrutide	6.562	694.649	110.25	%	1000	997	1.0
Sample ID 2400048	Retatrutide	6.547	674.117	107.00	%	1000	997	1.0
Retatrutide Std - 6 (SSC)	Retatrutide	6.550	603.308	95.76	%	999	995	1.1

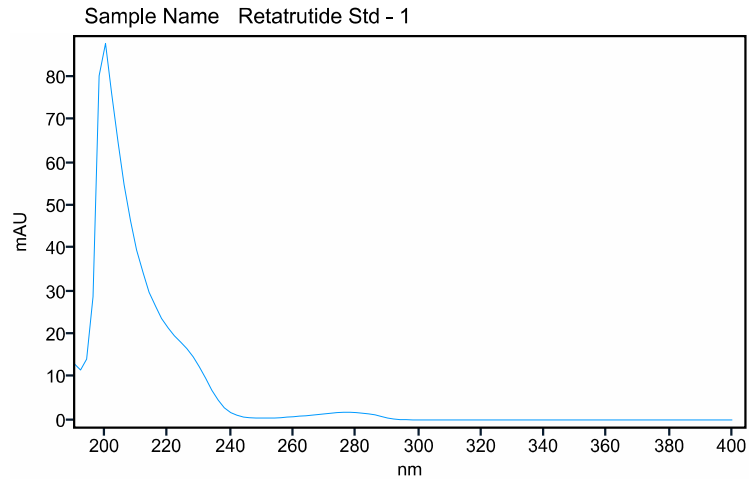
## UV Match Spectra

RT:

6.562

Compound Name:

Retatrutide



Compound Spectra Confirm Result Confirmed

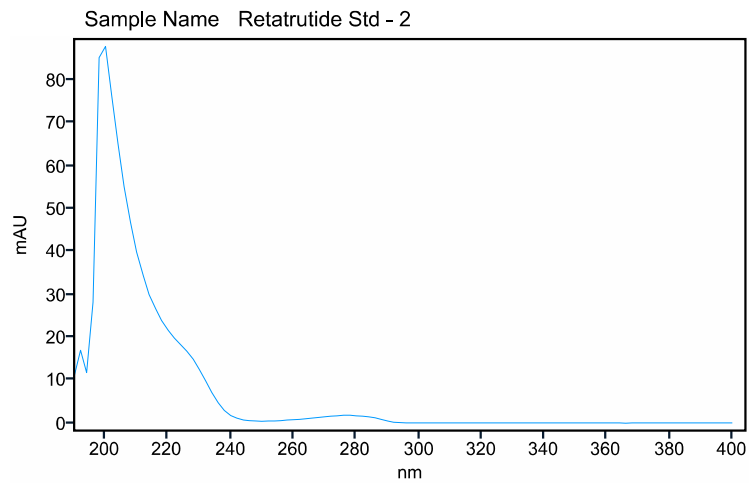
## UV Match Spectra

RT:

6.558

Compound Name:

Retatrutide



Compound Spectra Confirm Result Confirmed

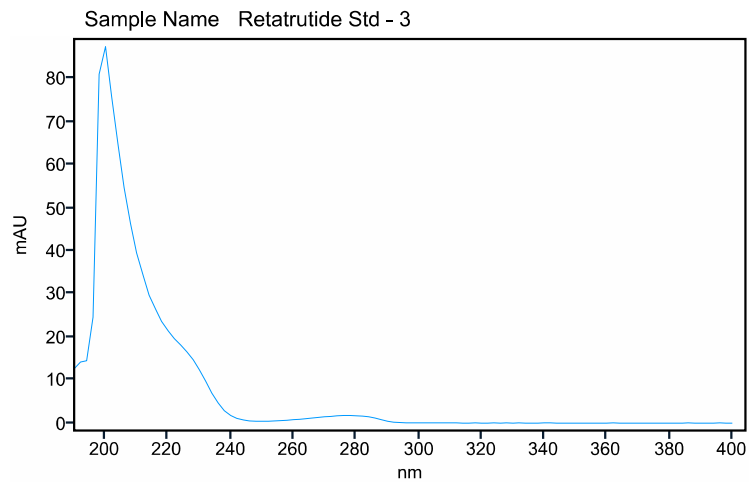
## UV Match Spectra

RT:

6.581

Compound Name:

Retatrutide



Compound Spectra Confirm Result Confirmed

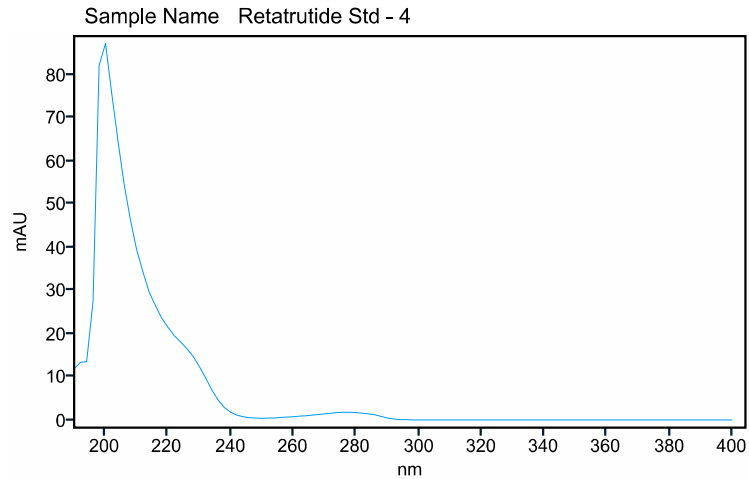
## UV Match Spectra

RT:

6.589

Compound Name:

Retatrutide



Compound Spectra Confirm Result Confirmed

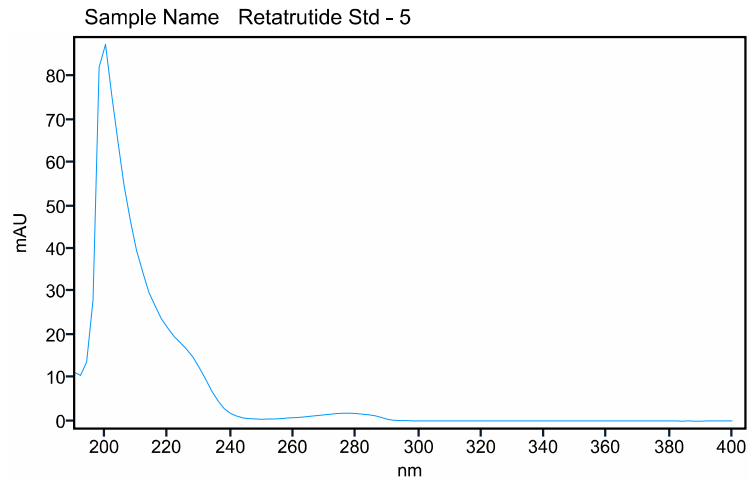
## UV Match Spectra

RT:

6.585

Compound Name:

Retatrutide



Compound Spectra Confirm Result Confirmed

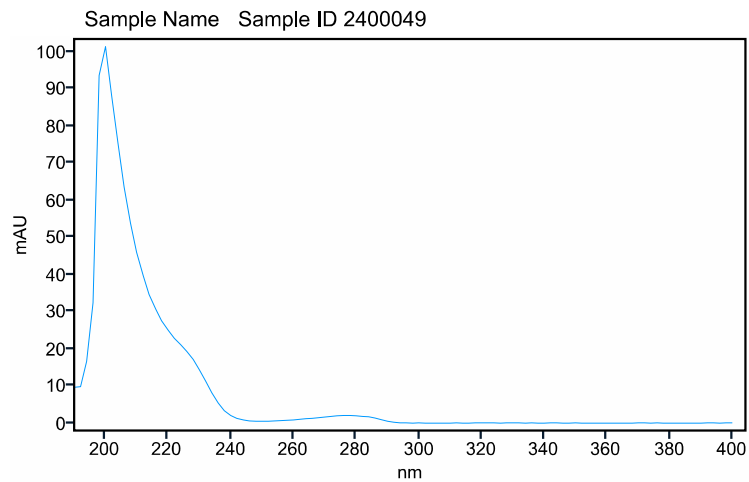
## UV Match Spectra

RT:

6.562

Compound Name:

Retatrutide



Compound Spectra Confirm Result Confirmed

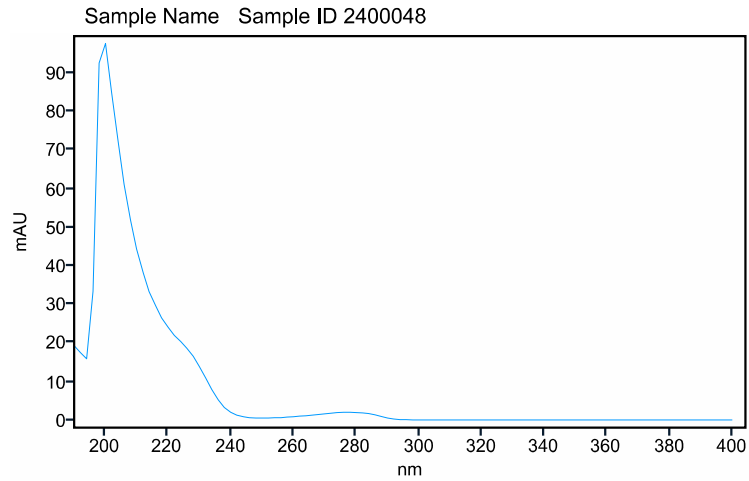
## UV Match Spectra

**RT:**

6.547

**Compound Name:**

Retatrutide



Compound Spectra Confirm Result Confirmed

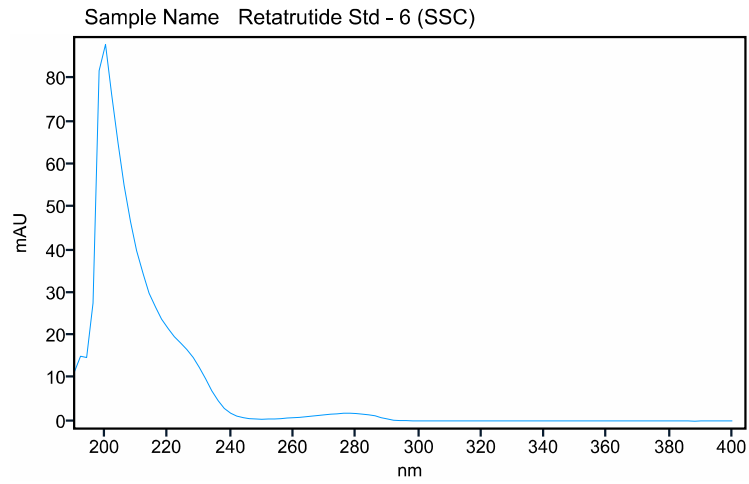
## UV Match Spectra

**RT:**

6.55

**Compound Name:**

Retatrutide

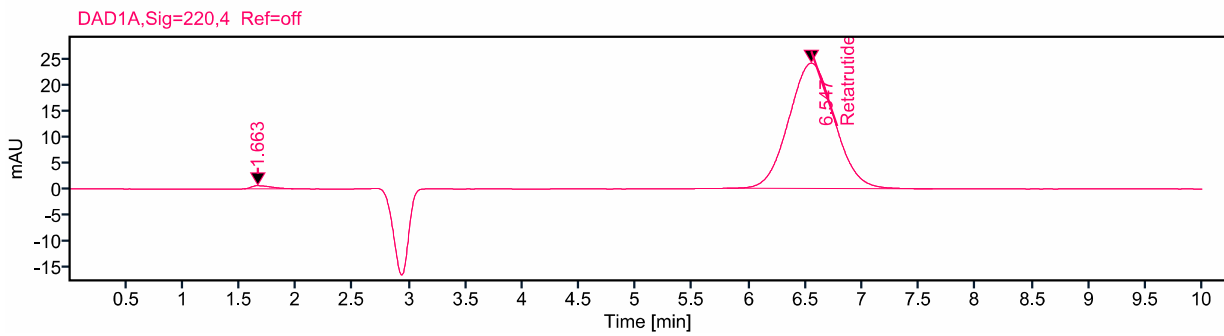
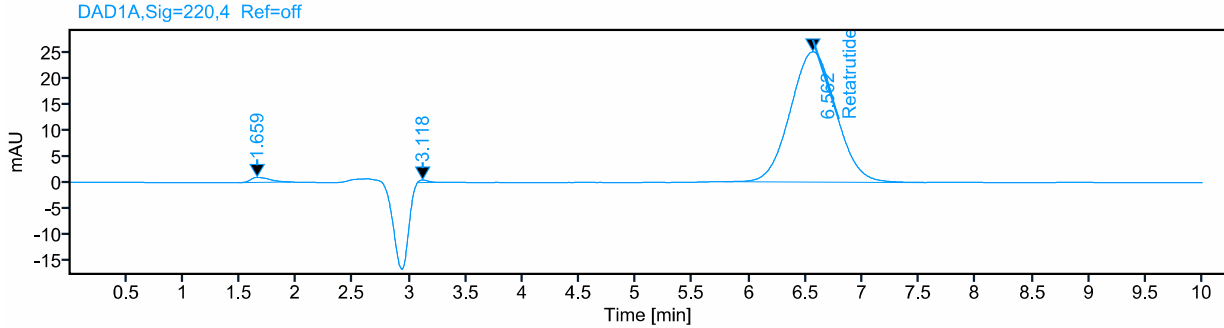


Compound Spectra Confirm Result Confirmed

# Sample Purity Report

Sequence Name 1004\_aml\_062624b

Sequence Acquired Date 2024-06-26 14:45:23-04:00



Sample Name	Name	RT	Area	Peak Area Percent
Sample ID 2400049		1.659	11.274	1.592
Sample ID 2400049		3.118	2.421	0.342
Sample ID 2400049	Retatrutide	6.562	694.649	98.067
Sample ID 2400048		1.663	7.101	1.042
Sample ID 2400048	Retatrutide	6.547	674.117	98.958

## BONUS: HOW DOES HPLC WORK?

This is a very simplified explanation:

- It starts with an HPLC method that has been developed and validated by TrustPointe Analytics. This means that the method has been proven to provide accurate results for your specific target compound.
- The sample is injected into the system using the Autosampler under conditions set by the validated method.
- The solvents on top of the system carry the sample through the HPLC column which separates the injected sample into its individual components by molecular size, charge, shape, interaction with the phases, etc.
- This separation allows TrustPointe to directly analyze only the target compound in the mixture. It also allows us to identify the target compound based on the time it takes to separate it in the column (retention time).
- The HPLC is equipped with a light detector, and the sample absorbs some of this light as it passes through the detector. This is converted to a signal which is then used to quantify a compound.
- All of our HPLC Methods utilize an external standard - which means we inject a standard solution prepared at a known concentration multiple times to create a calibration curve. That calibration curve is used to calculate the concentration of the target compound in the sample.

