



CERTIFICATE OF ANALYSIS (COA)

COA VERIFICATION

Report reference number: **SCG-R-0926-001**Report verification password: **Active/nuro-r-001**Verification link: shawgroupuk.com

Product name:	Retatrutide	Manufactured date:	28/05/2026
CAS no.:	2381089-83-2	Batch no.:	R260521
Test date:	30/05/2026	Batch size:	3420.56g
Re-test date:	29/05/2028	Molecular weight:	4731.33
Molecular formula:	$C_{221}H_{342}N_{46}O_{68}$		
Sequence:	Y-{Aib}-QGFTSDYSI-{a-Me-Leu}-LDK-{Lys(AEEA-yGlu-C20 diacid)}-AQ-{Aib}-AFIEYLLEGGPSSGAPPPS-NH2		
Storage conditions:	Keep product in an airtight container, protect from light, at a temperature of -15°C to -25°C		

TEST ITEM	SPECIFICATION	RESULT	
Appearance:	White or off white powder	White powder	✓
Solubility:	Soluble in water	Conforms	✓
Molecular weight confirmation:	Theoretical value $\pm$ 1Da	Confirmed	✓
HPLC: (High-performance liquid chromatography)	The retention time of the main peak in the chromatogram obtained from the test solution corresponds to that in the chromatogram obtained from the reference solution, as obtained in the assay	Confirmed	✓
HPLC purity: (main peak)	$\geq 98.0\%$	99.28%	✓
Related substance – total: (NMT – non-invasive micro-test technology)	Total impurities: NMT 1%	0.72%	✓
Related substance – single:	Single impurity: NMT 0.5%	0.24%	✓
Water content:	NMT 8.0%	3.4%	✓
Acetate content:	NMT 0.5%	0.3%	✓
pH: (C=5mg/mL)	6.0 - 9.0	7.3	✓
TFA: (trifluoroacetic acid)	NMT 0.5%	Not detected	✓
N,N-Dimethylformamide:	NMT 880 ppm	Not detected	✓
Methyl tert-butyl ether:	NMT 5000 ppm	Not detected	✓
Dichloromethane:	NMT 600 ppm	Not detected	✓
Acetonitrile:	NMT 410 ppm	40 ppm	✓
Assay: (anhydrous and salt free)	95.0% to 105.0%	98.65%	✓
Peptide content:	NLT (not less than) 85%	95%	✓
Bacterial endotoxins:	NMT 10 EU/mg	Conforms	✓
Microbiological examination: (TAMC – Total Aerobic Microbial Count / TYMC – Total Yeast and Mold Count)	TAMC $\leq$ 100 cfu/g TYMC $\leq$ 100 cfu/g	< 20 cfu/g	✓

CONCLUSION: Product conforms to specification

Dr. M Fleming

Note: This product was prepared by chemical synthesis. Use only for research purposes, not for human use
Independent laboratory testing using HPLC and mass spectrometry confirms peptide quality, with third-party verification through SHAW Compliance Group UK providing traceable results

