

ALC-PROOF-SEMAX-SELANK-20-63 · Rev 1

Catalog reference: semax-selank-20

Search code: ALC-PROOF-SEMAX-SELANK-20-63

Received: 2026-09-28

Analyzed: 2026-09-29

Reported: 2026-09-30

Lot: SYN-00063

Sample Summary

Product:	Semax + Selank - 20 mg	Principal peak purity:	99.02 % (area)
Identity evidence:	Not established by this report	Net content:	19.498 mg
Molecular formula:	Component formulas in supporting references	Neutral mass:	No single molecular mass for a blend
Appearance:	Lyophilized material	Chemical reference:	Component references in supporting notes

Analytical Results

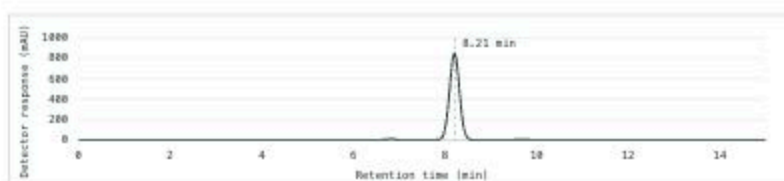
Review required

Profile profile-semax-selank-20 v1.

Determination / method	Result	Specification	Decision
Principal peak purity HPLC-01 · area basis Peak area percent. This is not a mass fraction.	99.02 % U = 0.08 %, k = 2	98 to 100 %	Pass simple
Net content QNT-01 · mass basis Specification applies to the declared label claim.	19.498 mg U = 0.3 mg, k = 2	18 to 22 mg	Pass guard-band

Methods: Quantitative assay; RP-HPLC with UV detection. Conditions, limits and calculated checks are included in the supporting pages.

Chromatogram



Paul Gütse

Paul Gütse

Reviewed by

Scan report code

Local design proof

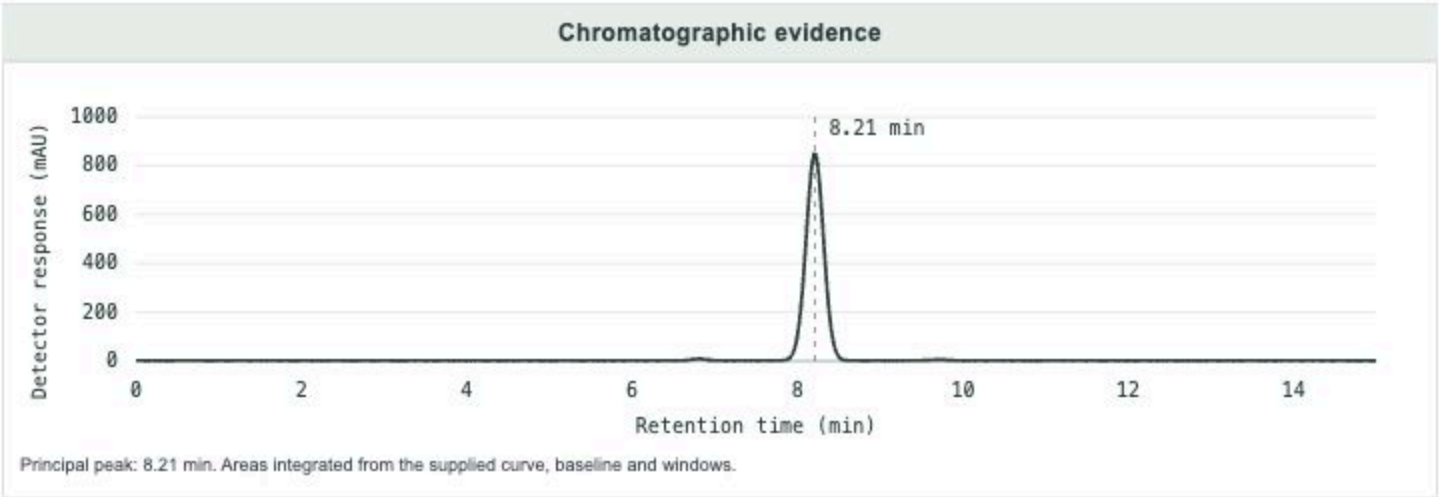
ALC-PROOF-SEMAX-SELANK-20-63



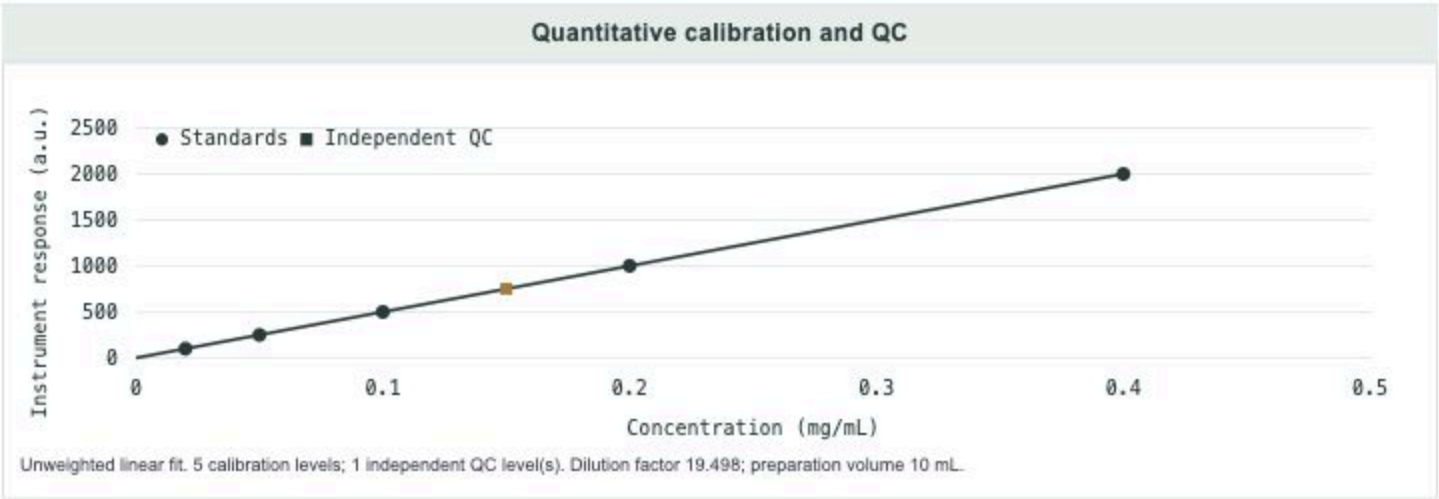
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Evidence incomplete. Composition and component assay evidence must be resolved before issuance.

Results apply only to the submitted sample and the methods listed in this report. Only the listed methods are covered. This report does not establish sterility, endotoxin content, biological activity or suitability for clinical use.



Integrated peak	Area (detector unit x min)	Area %
Principal peak	217.52653	99.02
Early impurity	1.38996	0.63
Late impurity	0.7564	0.34



Calculated checks and system suitability			
Analysis check	Value	Configured criterion	Assessment
Principal peak purity	99.02 % area	Minimum 98; caution below 99	pass
Assay relative to label claim	97.49 %	90 to 110	pass
Total integrated impurities	0.9771 % area	Maximum 2	pass
Largest integrated impurity	0.6327 % area	Maximum 1.5	pass
Retention time	8.21 min	8.21 +/- 0.2	pass
Principal peak width at half height	0.2416 min	0.2404 +/- 30%	pass
Theoretical plates	6399	Minimum 2000	pass
Resolution to Early impurity	3.86	Minimum 1.5	pass
Resolution to Late impurity	3.868	Minimum 1.5	pass
Tailing factor at 5% height	0.962	Maximum 2	pass
Principal signal to baseline noise	19763.1	Minimum 50	pass
Calibration R squared	1	Minimum 0.995	pass
Independent QC bias	0.15 %	Absolute maximum 5	pass
Calibration-derived content	19.498 mg	Agrees with reported content within uncertainty	informational

Assessment observations

ERROR · blend-composition

Blend reports require at least two identified components.

WARNING · impurity-detected

Early impurity: 0.633% area meets the configured impurity reporting threshold 0.05%.

WARNING · impurity-detected

Late impurity: 0.344% area meets the configured impurity reporting threshold 0.05%.

ERROR · blend-area-purity

A single principal peak area cannot establish the purity or composition of a blend. Supply a dossier for each component.

Methods and decision rules

QNT-01 · Quantitative assay 1

Instrument: analytical balance

Calibration and replicate measurement. Expanded uncertainty uses $k = 2$.

Expanded measurement uncertainty uses a coverage factor of 2.

HPLC-01 · RP-HPLC with UV detection 1

Instrument: HPLC-UV

C18 column, 150 x 4.6 mm, 5 μ m; 0.1% formic acid in water/acetonitrile; 5 to 60% B over 15 min; 1.0 mL/min; 25 C; 214 nm; 10 μ L injection.

Trapezoidal integration against the declared baseline and windows.

Simple acceptance compares the result with the stated limits. Guard band acceptance requires the full expanded uncertainty interval to fall within the limits; overlap is indeterminate. A failed specification remains a reportable result.

Scope and observations

20 mg total. No component ratio supplied.

Reference values apply to the named components separately, not the whole blend. Component ratios, chemical forms and identity require laboratory confirmation.

Component chemical reference properties

Reference component	Molecular formula	Neutral mass (Da)	Source
Semax	C37H51N9O10S	813.34796	PubChem CID 9811102
Selank	C33H57N11O9	751.43407	PubChem CID 11765600

Masses are calculated using the monoisotopic convention; they are not observed MS results.

Semax: Neutral Semax peptide, not the TFA salt. Reference analyte formula; counterions and hydration excluded. Sample chemical form is not confirmed.

Selank: Neutral Selank peptide. Reference analyte formula; counterions and hydration excluded. Sample chemical form is not confirmed.

Only the listed methods are covered. This report does not establish sterility, endotoxin content, biological activity or suitability for clinical use.

Sample reference: Catalog identity and nominal content supplied by the client.

Chemical form: Chemical form and sequence require a laboratory reference.

Chemical reference: Component references in supporting notes

Prepared by: alchemlabs