

COMPOUND GUIDE

Selank — Anxiolytic Tuftsin Analogue (TP-7)

7-AA peptide · Approved Russia for anxiety/neurasthenia · SubQ or intranasal

Quick Start



WHAT IT IS

Selank (also designated TP-7) is a synthetic heptapeptide developed by the Institute of Molecular Genetics of the Russian Academy of Sciences. It is a tuftsin analogue (tuftsin = immunomodulatory tetrapeptide Thr-Lys-Pro-Arg) extended with additional amino acids to improve stability. Approved in Russia as a prescription drug for generalised anxiety disorder and neurasthenia.



RESEARCH DOSING

SubQ: 250–500 mcg/day. **Intranasal:** 600–2,700 mcg/day split into 2–3 administrations. The intranasal route is favoured in Russian clinical research; SubQ is more common in Western research contexts. Half-life is short (~1–3 min plasma, but effects persist longer due to downstream signalling).



CYCLE STRUCTURE

4 weeks on / 4 weeks off for SubQ protocols. Intranasal research protocols typically use 14–21 day courses followed by a washout period before resuming. The on/off structure is used to prevent tolerance.



REGULATORY STATUS

Approved prescription drug in Russia for anxiety and neurasthenia. No FDA approval. No ClinicalTrials.gov Phase 1–3 program registered as of 2026. Not on WADA banned list. For research purposes only outside Russia.



Dosing Protocol

ROUTE	DOSE	FREQUENCY	DURATION	NOTES
SubQ	250–500 mcg	Once daily	4 weeks on, 4 weeks off	Western research standard
Intranasal	200–900 mcg per administration	2–3x daily	14–21 day course + washout	Russian clinical standard; 2–3 sprays of 200–300 mcg each



Supplies & Reconstitution (SubQ)

Reconstitution Math — 11 mg Vial (3 mL BAC)

TARGET DOSE	UNITS (U-100)	DOSES / VIAL
100 mcg	2.7 units	110
200 mcg	5.5 units	55
300 mcg	8.2 units	36.7
500 mcg	13.6 units	22
600 mcg	16.4 units	18.3
1000 mcg	27.3 units	11

Reconstitute the 11 mg vial with 3.0 mL bacteriostatic water → 3.67 mg/mL (3,667 mcg/mL). U-100 syringe = 100 units per mL. Swirl gently — do not shake. Refrigerate 2–8°C.

Reconstitution Steps

01

Warm the vial

Allow lyophilised vial to reach room temperature before reconstitution.

02

Swab and draw

Alcohol swab both vial tops. Draw required BAC water volume.

03

Inject along the wall

Run BAC water slowly along the inside vial wall. Do not jet onto the powder.

04

Swirl gently

Swirl until clear and fully dissolved. Do not shake.

05

Refrigerate

Store at 2–8°C for up to 30 days. Do not freeze after reconstitution. Protect from light.



Mechanism of Action

GABA MODULATION

Modulates GABAergic transmission — the primary inhibitory neurotransmitter system. Proposed to enhance GABA-A receptor sensitivity without direct agonism, producing anxiolytic effects without benzodiazepine-like dependence or sedation in research models.

ENKEPHALIN STABILISATION

Inhibits enzymatic degradation of endogenous enkephalins (endogenous opioid peptides), prolonging their activity. Enkephalins modulate stress response and pain sensitivity in the brain and peripheral nervous system.

SEROTONIN SYSTEM

Influences serotonin turnover and 5-HT receptor activity in limbic brain regions. Studied in animal anxiety models (elevated plus maze, Vogel conflict test). Not a direct serotonin agonist.

BDNF EXPRESSION

Increases Brain-Derived Neurotrophic Factor (BDNF) expression in hippocampus and cortex in animal models. BDNF is associated with neuroplasticity, memory consolidation, and resilience to stress.



Research Status



LIMITED INDEPENDENT REPLICATION

Published Selank research consists primarily of studies from Russian academic institutions. No Phase 1–3 trials are registered on ClinicalTrials.gov as of mid-2026. Independent replication in Western research contexts is very limited. The quality and publication standards of available studies vary widely.

STUDY TYPE	FINDING	LIMITATION
Russian RCTs (anxiety)	Reduced anxiety scores vs placebo; comparable to benzodiazepines in some measures	Russian-only journals; limited independent replication
Animal models	Anxiolytic in elevated plus maze; memory-enhancing in learning paradigms	Animal-to-human extrapolation unestablished
Gene expression studies	BDNF upregulation; IL-6 modulation observed	In vitro and animal; no human confirmation



Storage

STATE	TEMPERATURE	DURATION	NOTES
Lyophilised (powder)	–20°C (freezer)	Up to 24 months	Protect from light and moisture
Reconstituted (liquid)	2–8°C (refrigerator)	Up to 30 days	Do not freeze after reconstitution



DISCLAIMER

This document is an educational research reference only. Selank is not FDA-approved. Published human data is primarily from Russian sources and has not been independently replicated in Western Phase 1–3 trials. By purchasing from LA LAB you confirm you are 18+ and that products are for research purposes only.