



# SEMAK (Semax)

ACTH(4–10) Analogue · Cognitive & Neurological Support

## OVERVIEW

Semax is a synthetic heptapeptide analogue of ACTH(4–10), originally developed in Russia where it holds full clinical approval. It has demonstrated significant neuroprotective, nootropic, and neurorestorative properties and is studied for ADHD, Rett syndrome, stroke recovery, and cognitive enhancement. Semax is one of the most potent nootropic peptides available with a strong BDNF-stimulating and multi-pathway neurological profile.

## SPECIFICATIONS

<b>Size</b>	10mg per vial
<b>Reconstitution</b>	Add 2ml BAC Water → 5,000mcg/ml
<b>Route</b>	SubQ injection or intranasal
<b>Storage</b>	Refrigerate 2–8°C; protect from light

## CLINICAL APPLICATIONS

■ ADHD — attention, focus & control	■ Rett syndrome neurological support
■ Stroke & TBI cognitive recovery	■ Neuroprotection & brain repair
■ Memory & cognitive enhancement	■ Anxiety & stress modulation

## MECHANISM OF ACTION

Semax stimulates BDNF and NGF expression, supporting neuronal survival, synaptic plasticity, and neurogenesis. It modulates dopaminergic and serotonergic transmission, improving attention and mood. Anti-inflammatory neural effects and enhanced cerebral blood flow further contribute to its broad neuroprotective and cognitive-enhancing profile across multiple brain regions.

## RECONSTITUTION & DOSING GUIDE · SubQ Injection · U-100 Insulin Syringe

2ml BAC Water + 10mg vial = 5,000mcg/ml · U-100 syringe: 10 units = 500mcg · Effective SubQ or intranasally

PHASE	DOSE	SYRINGE UNITS (U-100)	FREQUENCY
<b>Starting</b>	100mcg	2 units	Once daily
<b>Low</b>	250mcg	5 units	Once daily
<b>Standard</b>	500mcg	10 units	Once or twice daily
<b>High</b>	1mg (1,000mcg)	20 units	Once or twice daily
<b>Max Dose</b>	1.5mg (1,500mcg)	30 units	Once or twice daily