# KAIA PEPTIDES — PRODUCT SHEET

# Semax (10mg)

Cognitive Support Peptide – Focus, Mood, Memory & Neuroprotection

### What It Is

Semax is a synthetic peptide developed from a segment of ACTH (adrenocorticotropic hormone) but *without* hormonal activity. It is widely researched for supporting cognitive function, memory, neuroprotection, mood balance, and brain-derived neurotrophic factor (BDNF) pathways.

It is often studied in models involving stress, cognitive fatigue, learning performance, and neurochemical balance.

# **Understanding Semax — A Metaphorical Story**

Imagine your brain as a massive library with billions of books.

Every book is a memory, a skill, a piece of knowledge, or a decision waiting to be made.

But in this library:

- · Some librarians are tired
- The sorting machines are slow
- Books pile up on carts
- New information gets misplaced
- The lighting flickers under stress

Now imagine a new specialist walks in. A librarian unlike any other.

#### That specialist is Semax.

Here's what Semax does inside the "library" of your brain:

#### It turns on the lights (increases BDNF activity)

BDNF is like the electrical system of the library — the brighter it is, the faster the librarians work.

Semax helps switch on these "lights," making everything clearer, sharper, and faster.

#### It organizes the shelves (supports memory formation)

Semax improves the ability of librarians to:

- File memories correctly
- Retrieve information quickly
- Reduce misplaced data
- Keep the system organized even under pressure

#### It speeds up the sorting machine (supports cognitive processing)

Your mental "conveyor belts" — attention, focus, and mental speed — run faster and smoother with less effort.

## It brings calm to the library (supports mood & stress pathways)

When the library gets overwhelmed during stress:

- Books spill
- Files get mixed
- Decisions slow

Semax helps calm the chaos and keeps everything flowing smoothly.

## It protects rare books (neuroprotection)

Some books are fragile — long-term memories, emotional stability, creativity.

Semax adds protective casing around these, keeping them safe from stress, inflammation, and oxidative wear.

### The Result

#### A brain that:

- Thinks faster
- Remembers better
- Stays calmer
- Adapts under pressure
- Organizes information more efficiently

This is the simplest way to visualize Semax's cognitive and neuroprotective support in research models.

# **Primary Research Benefits**

(Summarized from published scientific literature)

#### Cognitive Performance

- Supports attention, processing speed, and mental clarity
- May improve working memory and learning ability

## Neuroprotection

- Helps reduce oxidative and inflammatory stress
- Supports neuronal survival pathways
- Increases BDNF expression in several models

## Mood & Stress Support

- May balance brain chemistry under stressful conditions
- Shown to support emotional regulation in research

## Circulation & Oxygen Utilization

- May improve blood flow in select brain regions
- Supports oxygenation during high cognitive load

## **Common Research Use Cases**

- Memory & learning research
- Focus, attention, and cognitive performance models
- Stress resilience and mood regulation studies
- BDNF pathway activation research
- Neuroprotective mechanism exploration

# **Typical Research Protocols (Literature-Based)**

(For educational/reference purposes; not medical advice)

• **Duration**: 10–30 days

• **Frequency:** 1–2× daily depending on the model

• Administration Routes in Studies: Intranasal or subcutaneous

• Vial: 10mg lyophilized peptide

# **Storage & Stability**

- Store lyophilized at 2–8°C
- Refrigerate after reconstitution; use within 30 days
- Keep away from direct heat and light

# **Safety Profile (Research-Based Notes)**

- Non-stimulatory
- Not a hormone
- Generally well tolerated in cognitive research
- No significant toxicity observed in available data

#### **Format**

- 10mg lyophilized powder
- Research Use Only
- Purity: ≥99% (verified by third-party analysis)

# **Legal & Compliance**

For Research Use Only. Not for human consumption. Not approved by the FDA to diagnose, treat, cure, or prevent any disease.

# **Brand Finishing (Kaia Style)**

Sharper thinking. Calmer pathways.
Built for researchers exploring cognitive performance.