

# NeuroBiota

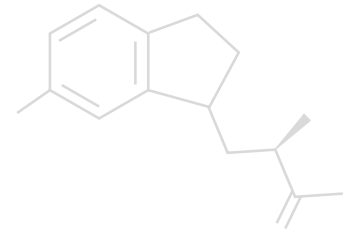
Shelf-stable probiotic blend important for the gut-brain axis, optimal mood, neurotransmitter synthesis, and balancing the immune response\*

- ✓ Room temperature stable
- ✓ Acid resistant capsule to protect against stomach acidity\*
- ✓ Unique, mood-boosting strains<sup>1,2\*</sup>
- ✓ Moisture-decreasing glass bottle



## Key Ingredients

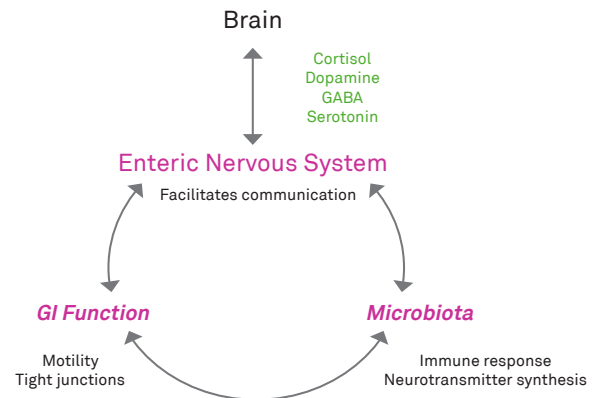
<b>Lactobacillus paracasei HA-196</b>	<ul style="list-style-type: none"> <li>Research shows <i>L. paracasei</i> HA-196 positively impacted <b>bowel movement regularity</b> and consistency, promoting healthy stool<sup>22*</sup></li> </ul>
<b>Lactobacillus rhamnosus GG</b>	<ul style="list-style-type: none"> <li>Demonstrates protective effects on <b>epithelial barrier function against an unbalanced microbiota</b> in multiple sets of data<sup>5,6*</sup></li> </ul>
<b>Lactobacillus helveticus Rosell®-52</b>	<ul style="list-style-type: none"> <li>Research shows <i>L. helveticus</i> Rosell®-52 and <i>B. longum</i> Rosell®-175 (Cerebiome®) <b>improved mood and median cortisol levels</b><sup>1*</sup></li> </ul>
<b>Bifidobacterium animalis ssp. lactis LAFTI® B94</b>	<ul style="list-style-type: none"> <li>Synergistic activity with <b>inulin</b>, reduced feelings of <b>abdominal discomfort and bloating</b> and displayed protective effects against <b>opportunistic pathogens</b> to promote feeling balanced<sup>20,21*</sup></li> </ul>
<b>Lactobacillus brevis HA-112</b>	<ul style="list-style-type: none"> <li>Demonstrates the most significant <b>GABA production</b> compared to 91 strains<sup>2*</sup></li> </ul>
<b>Bifidobacterium longum Rosell®-175</b>	<ul style="list-style-type: none"> <li>Quality of life questionnaires revealed participants felt <b>more energetic and less tired</b> with supplementation<sup>22*</sup></li> </ul>



## The Science

- The brain receives neurotransmitters synthesized in the gut and promotes gut health through **motility, immune health, and tight junction function**<sup>6-9</sup>
- The enteric nervous system contains **5x** as many neurons as the spinal cord and helps relay messages from the brain to the gut<sup>8-10</sup>
- Proper gut health promotes **balanced immune function, healthy neurotransmitter production**, and improved digestion<sup>8</sup>

## The Gut-Brain Connection

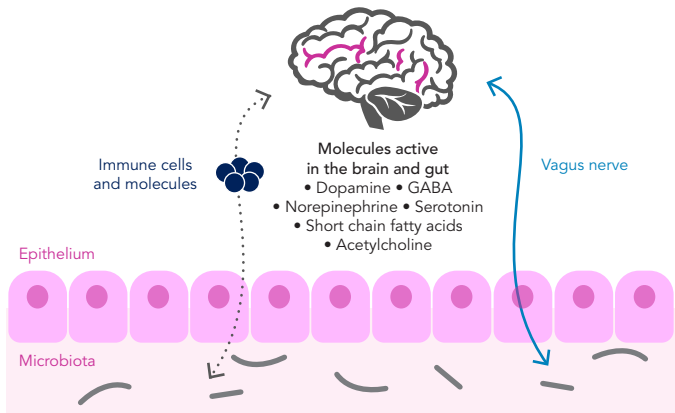


Green = Biomarker

\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

# MORE SCIENCE BEHIND NEUROBIOTA

Figure 1. Neurotransmitters and the Gut



## The microbiota helps regulate neurotransmitter synthesis and gut health

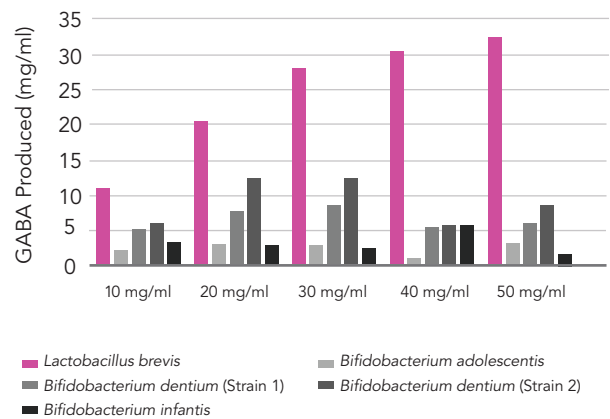
The gut creates and stores a significant number of neurotransmitters and neurotransmitter receptors<sup>12</sup>

- The gut contains more than 90% of the body's serotonin and more than 50% of the body's dopamine<sup>13</sup>
- GABA receptors along the gastrointestinal tract help modulate gut motility, gastric emptying, and immune function<sup>13,14</sup>

A properly balanced microbiota is essential to promote general GI health and neurotransmitter levels<sup>15,16</sup>

- The microbiota regulates key neurotransmitter levels including GABA, norepinephrine, dopamine, and serotonin<sup>16</sup>
- Conversely, a poor microbiota can directly impact serotonin migration to the brain and expression of brain-derived neurotropic factor (BDNF) as seen *in vivo*<sup>17,18</sup>

Figure 2. Probiotic Strain by Production of GABA



## Benefits of Specific Strains in NeuroBiota

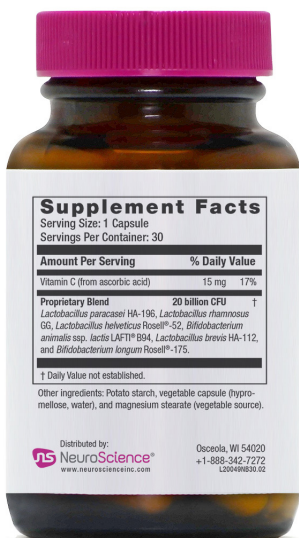
Certain probiotics influence neurotransmitter production and emotional well-being more than other strains

- Of the 91 strains tested, only 5 produced GABA, and *L. brevis* produced the most GABA (Fig. 2)<sup>2,13\*</sup>
- Research shows *L. paracasei* HA-196 and *B. longum* Rosell®-175 were shown to increase emotional well-being and social functioning after 8 weeks<sup>22\*</sup>

Including a variety of probiotic strains can help to improve the immune response and gut integrity<sup>3,4\*</sup>

- Research shows that a postbiotic created by *L. rhamnosus* (GG) helped modulate intestinal barrier function by regulating immune factors like TNF- $\alpha$ <sup>19\*</sup>
- *L. helveticus* Rosell®-52 and *B. longum* Rosell®-175 (Cerebiome®) improved feelings of nausea and abdominal discomfort during times of stress<sup>23\*</sup>

NeuroBiota contains a unique probiotic blend to help populate the microbiota with specific strains important for emotional well-being<sup>1\*</sup>



Find the right supplement with NeuroSelect

Learn more at [www.neuroselect.com](http://www.neuroselect.com)

Item Number	Available Sizes	Serving Size
20049	30 Capsules	1 Capsule

All NeuroScience products undergo rigorous third-party testing to guarantee label claims of each ingredient and the absence of heavy metals, pesticides, residual solvents, and microbes

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