

## **Serotonin Knows #1**

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*(Quotes from **Tocris Biosciences**: Nicholas Barnes and John Neumaier)*

### **Neuronal 5-HT Receptors and SERT (5-HTT)**

“5-hydroxytryptamine (5-HT, serotonin) is an ancient biochemical manipulated through evolution to be utilized extensively throughout the animal and plant kingdoms. Mammals employ 5-HT as a neurotransmitter within the *central and peripheral nervous systems*, and also as a local hormone in numerous other *tissues, including the gastrointestinal tract, the cardiovascular system, and immune cells.*”

***Serotonin is a neurotransmitter and a hormone.*** As a neurotransmitter it modulates both the central nervous system (CNS) and the peripheral nervous system (PNS). As a hormone serotonin plays numerous roles; it works in the gastrointestinal tract, the cardiovascular system and in our immune cells.

“Part of the ability of 5-HT to mediate a wide range of actions arises from the imposing number of 5-HT receptors.”

***The serotonin system has an imposing number of receptors: 14 from 18 genes.***

#1	5-HT1A
#2	5-HT1B
#3	5-HT1D
#4	5-HT1E
#5	5-HT1F
#6	5-HT2A
#7	5-HT2B
#8	5-HT2C
#9	5-HT3
#10	5-HT4
#11	5-HT5A
#12	5-HT5B
#13	5-HT6
#14	5-HT7

***SERT (5-HTT) is critical to the 5-HT system, functioning as the serotonin “transporter” for the 14 receptors.***