**CTAP (trifluoroacetate salt)**

**Item No. 14959**

**Formal Name:** D-phenylalanyl-L-cysteinyl-L-tyrosyl-D-tryptophyl-L-arginyll-L-threonyl-3-mercapto-L-valyl-cyclic (2→7)-disulfide-L-threoninamide, trifluoroacetate salt

**MF:** C_{51}H_{69}N_{13}O_{11}S_{2} • XCF_{3}COOH

**FW:** 1,104.3

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years

*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

**Laboratory Procedures**

CTAP (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the CTAP (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

**Description**

CTAP is a water soluble, cyclic octapeptide which acts as a receptor antagonist that is selective for the µ opioid receptor (IC_{50} = 3.5 nM) over the δ receptor (IC_{50} = 4,500 nM).\(^1\) It is a poor antagonist of the somatostatin receptor (IC\(_{50}\) = 14.3 μM).\(^1\) CTAP is at least 10-fold more potent than naltrexone as an antagonist of diverse compounds which have antinociceptive effects through the µ opioid receptor.\(^2\) It resists enzymatic metabolism in the blood and enters the brain and cerebrospinal fluid.\(^3\)

**References**