

**DATA SHEET**

**Product Name:** Entacapone

**Catalog #:** CV-1012

**Alt:** CAS # 130929-57-6; (2E)-2-Cyano-3-(3,4-dihydroxy-5-nitrophenyl)-N,N-diethyl-2propenamide

**Molecular Mass:** 305.3

**Analysis:** >98% (HPLC); NMR (conforms)

**Supplied As:** Yellow powder

**Resuspension:** May be dissolved in DMSO (30 mg/ml); or ethanol (3 mg/ml)

**Storage:** Store desiccated as supplied at -20°C for up to 2 years. Store solutions at -20°C for up to 1 month.

**Description:** Potent catechol O-methyltransferase (COMT) inhibitor (IC<sub>50</sub> = 14.3, 20.1 and 73.3 nM for rat liver soluble COMT, total COMT and membrane-bound COMT respectively)<sup>1</sup>. Increases bioavailability of LDOPA as adjunct therapy for Parkinson's disease<sup>2</sup>. Inhibits α-synuclein aggregation *in vitro* and inhibits α-synuclein-induced cell death in PC-12 cells<sup>3</sup>. Antioxidant. Inhibits oxidative stress-induced cell death<sup>4</sup>.

**References:**

1. Forsberg, M., et al., (2003) J. Pharmacol. Exp. Ther., 304 : 498
2. Merello, M., et al., (1994) J. Neurol. Neurosurg. Psychiatry., 57 : 186
3. Di Giovanni, S., et al., (2010) J. Biol. Chem., 285 : 14941
4. Chen, A.Y., et al., (2016) Med. Sci. Monit., 22 : 687

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