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## **Product Information**

Product ID S9753 OН CAS No. 94-07-5 н **Chemical Name** 4-Hydroxy-α-[(methylamino)methyl]benzenemethanol Synonym Analeptin, Ethaphene, Oxedrine, Parasympatol, Simpalon, Synerphrin, Synthenate HC Formula C<sub>9</sub>H<sub>13</sub>NO<sub>2</sub> Formula Wt. 167.21 Bulk quanitites available upon request Melting Point 184-185°C Purity ≥98% Product ID Size Solubility Soluble in water (400 S9753 1 g mg/mL). S9753 5 g S9753 10 g Store Temp Ambient S9753 25 g Ship Temp Ambient

**Description** Synephrine is an endogenous alkaloid that can also be found in citrus fruits, *Evodia*, and *Zanthoxylum*. Synephrine exhibits vasoconstrictive, anti-inflammatory, antibacterial, and gastrointestinal motility modulating activities. Synephrine acts as a positive inotrope, activating adrenergic receptors (displaying partial selectivity for α-adrenergic receptors), TAAR-1 receptors, and 5-HT receptors. Synephrine decreases levels of ROS, activity of myeloperoxidase, infiltration of inflammatory cells, and expression of TNF-α and IL-6 in the lungs of animal models of lung injury and inflammation. Additionally, synephrine inhibits gastrointestinal motility and slows gastric emptying.

**References** Wu Q, Li R, Soromou LW, et al. p-Synephrine suppresses lipopolysaccharide-induced acute lung injury by inhibition of the NF-κB signaling pathway. Inflamm Res. 2014 Jun;63(6):429-39. PMID: 24487736.

Ozçelik B, Kartal M, Orhan I. Cytotoxicity, antiviral and antimicrobial activities of alkaloids, flavonoids, and phenolic acids. Pharm Biol. 2011 Apr;49(4):396-402. PMID: 21391841.

Fang YS, Shan DM, Liu JW, et al. Effect of constituents from Fructus Aurantii Immaturus and Radix Paeoniae Alba on gastrointestinal movement. Planta Med. 2009 Jan;75(1):24-31. PMID: 19016407.

Endoh M, Schümann HJ, Krappitz N, et al. alpha-Adrenoceptors mediating positive inotropic effects on the ventricular myocardium: some aspects of structure-activity relationship of sympathomimetic amines. Jpn J Pharmacol. 1976 Apr;26(2):179 -90. PMID: 7694.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.