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Propacetamol

National Cancer Institute

Source

National Cancer Institute. *Propacetamol*. NCI Thesaurus. Code C75081.

A water-soluble para-aminophenol derivative and ester prodrug of acetaminophen in which acetaminophen is bound to the carboxylic acid diethylglycine, with analgesic and antipyretic activities. Upon intravenous administration, propacetamol is hydrolyzed by plasma esterases into its active form acetaminophen. Although the exact mechanism of action has yet to be fully elucidated despite its widespread use, acetaminophen enters the central nervous system and acts centrally. This agent binds to cyclooxygenase (COX) and prevents the metabolism of arachidonic acid to prostaglandin. A reduction in prostaglandin formation relieves pain and reduces fever. Acetaminophen may also act centrally on cannabinoid receptors and on N-methyl-D-aspartate (NMDA) receptors.