

Emerging Designer Drug Monograph

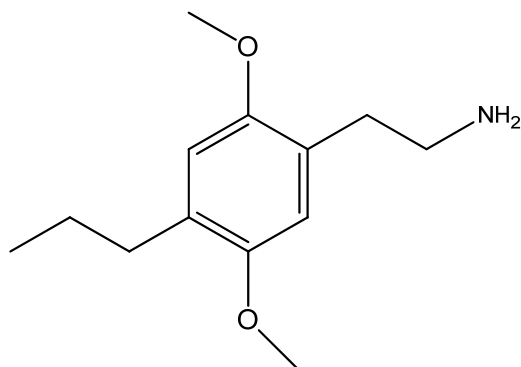
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Drug Name: 2C-P

Synonyms: 2-(2,5-Dimethoxy-4-propylphenyl)ethanamine; 2,5-dimethoxy-4-(n)-propylphenethylamine

Structure:



Formula: C₁₃H₂₁NO₂

Molecular Weight: 223.3

Pharmacological drug class: 2C-P belongs to a family of 4-substituted 2,5-dimethoxyphenylethylamines (2C- drugs), first synthesized and tested by Alexander Shulgin (1). 2C-P was described as the most potent psychedelic drug in the entire 2C- family with pronounced hallucinogenic effect (1). It was also found difficult to establish an effective and safe dose for the drug (1).

Metabolism: In spite of the lack of data on 2C-P metabolism, reasonable predictions could be made on the basis of the known pathways (2) for the analogs: 2C-D (3), 2C-E (4), 2C-I (5) and 2C-B (6-10). All of them undergo the following metabolic steps in animal (mice, rat) and *in vitro* studies: *O*-demethylation in positions 2 and 5, *N*-acetylation, β -hydroxylation (two diastereomers for each), deamination with subsequent oxidation to carboxylic acid or reduction to alcohol. 2C-D and 2C-E, the most closely related analogs to 2C-P, were also found (3, 4) to metabolize by hydroxylation (followed by carboxylation) in the alkyl radical located in position 4. 2C-P would likely follow the same path. Metabolites are excreted in urine mostly as conjugates.

A recent study of 2C-B metabolism in human (11) found, that the major path was oxidative deamination. The main products in urine were: 4-bromo-2,5-dimethoxyphenylacetic acid (73%), 4-

bromo-2-hydroxy,5-methoxyphenylacetic acid (13%) and 4-bromo-2,5-dimethoxyphenylethyl alcohol (4.5%). *N*-acetylation products (acetamides) accounted for only a small portion of the detected metabolites. This suggests that 2C-P may behave similarly in the human body.

Reported use: Shulgin (1) and other users (12) describe 2C-P as a strong psychedelic drug with intense visuals, a very slow onset (3-4 hours), when administered orally, and long action (4-5 hours plateau). The effect may last for more than 24 hours. The users report mixed experiences from favorable to uncomfortable and even disastrous with dosages ranging from 6 to 16 mg. Severe side effects were reported (12). Nevertheless, the users agree (12) that despite discomfort, 2C-P provides outstanding unique experience.

Analysis: GC/MS was commonly used (3-12) for analysis of various 2C-drugs and their metabolites with various extraction and derivatization techniques.

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