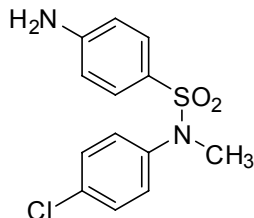


**4-Amino-*N*-(4-chlorophenyl)-*N*-methyl-benzenesulfonamide** - benzenesulfonanilide-type cyclooxygenase-1-selective inhibitor



Chemical Formula: C<sub>13</sub>H<sub>13</sub>ClN<sub>2</sub>O<sub>2</sub>S  
Molecular Weight: 296.77

Ref.: Zheng et al. **Analgesic agents without gastric damage: Design and synthesis of structurally simple benzenesulfonanilide-type cyclooxygenase-1-selective inhibitors.** *Bioorganic & Medicinal Chemistry* (2007), 15, 1014-1021

*N*-methyl-*N*-(4-chlorophenyl) 4-aminobenzenesulfonamide and *N*-methyl-*N*-(4-aminophenyl) 4-chlorobenzenesulfonamide, which possess a *p*-amino group on the benzenesulfonyl moiety and *p*-chloro group on the anilino moiety, showed COX-1-selective inhibition. Moreover, ***N*-methyl-*N*-(4-chlorophenyl) 4-aminobenzenesulfonamide**, which is the most potent compound in this study showed more potent analgesic activity than that of aspirin at 30 mg/kg by po. The anti-inflammatory activity and gastric damage, however, were very weak or not detectably different from aspirin. Since the structure of our COX-1 inhibitors are very simple, they may be useful as lead compounds for superior COX-1 inhibitors as analgesic agents without gastric disturbance.

OTAVA catolg no.	CAS RN	Amount	Delivery time	Purity
7070707001	304913-22-2	1 mg 5 mg 25 mg 1 gram	In-stock In-stock In-stock In-stock	≥ 95% by HPLC, <sup>13</sup> C NMR & <sup>1</sup> H NMR