

## General Pharmacology of DA-6034, a New Therapeutic Agent of Inflammatory Bowel Disease

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DA-6034 (7-carboxymethoxy-3', 4', 5-trimethoxy flavone) is a new synthetic flavonoid derivative under development as anti-inflammatory bowel disease agent. DA-6034 has low bioavailability (1.15%) and rarely distributes into other organs. It is slowly excreted in stool through gastrointestinal tract for 24 hours. The therapeutic effect of DA-6034 on inflammatory bowel disease animal model may be due to local effect on intestinal mucosa. In this study, we investigated the general pharmacological properties of DA-6034 on central nervous, respiratory, cardiovascular, gastrointestinal and other organ systems in experimental animals.

DA-6034 (3 ~ 30 mg/kg, p.o.) had no effects on the behavior such as hexobarbital-induced sleeping time, strychnine- or pentylentetrazole-induced convulsion, body temperature, spontaneous motor activity, acetic acid-induced writhing even though at a high dose of 30 mg/kg in rats. There is no significant difference on blood pressure, heart rate, intestinal charcoal propulsion, the gastric juice secretion, and urine volume and electrolyte excretion between DA-6034 treatment groups and normal control.

In guinea pig trachea or ileum, the contractility of DA-6034 treatment groups was similar to those of normal and sinus rate of atrium had no difference in a range of  $10^{-6}$  -  $10^{-4}$  M.

In summary, DA-6034 had no effects on the CNS, cardiovascular system, and gastrointestinal system, which suggested that DA-6034 could be used orally without serious side effects.