**A COMPARATIVE EFFECTS OF CU 763-16-04 AND CU 763-15-13 ON**

**THE SMOOTH MUSCLE CONTRACTION OF ISOLATED RAT**

**STOMACH AND EFFECTS OF CU 763-16-04 ON ISOLATED RABBIT**

**AORTA.**

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**ABSTRACT**

The effects of CU 763-16-04 and CU 763-15-13, of which main structure was similar to synthetic K+ -channel opener on the smooth muscle contraction of isolated rat stomach, rabbit aorta, rat aorta and vasdeferens had been studied. CU 763-16-04 as well as CU 763-15-13 reduced the smooth muscle contractions of rat stomach, which induced by 5-HT, Ach, CaCl2 and BaCl2 in high potassium depolarizing solution and TEA; but less stronger than papaverine. Pre-incubation with CU 763-16-04 reduced the smooth muscle contractions of rat stomach which induced by 5-HT in Ca2+ -free Krebs buffer. CU 763-16-04 as well as CU 763-15-13 reduced the smooth muscle contractions of rat aorta and vasdeferens, but CU 763-16-04 increase the smooth muscle contractions of rabbit aorta induced by 5-HT. CU 763-16-04 reduced the smooth muscle contractions of rat vasdeferens, of which different from CU 763-15-13 induced by NE. These results suggested that CU 763-16-04 and CU 763-15-13 produced non-specific relaxing effect on isolated smooth muscle. The mechanism of action of CU 763-16-04 and CU 763-15-13 may interfere with the release of intracellular calcium from SR and calcium movement through calcium channel, probably involve by opening K+ -channel.