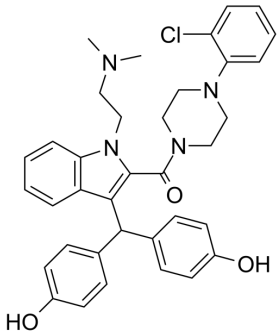
KW-8232 free base

Cat. No.:	HY-100304
CAS No.:	170365-25-0
Molecular Formula:	$C_{36}H_{37}ClN_4O_3$
Molecular Weight:	609.16
Target:	Prostaglandin Receptor; SARS-CoV
Pathway:	GPCR/G Protein; Anti-infection
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description	KW-8232 free base, an orally active anti-osteoporotic agent, and can reduces the biosynthesis of PGE2[1].
IC_{50} & Target	Prostaglandin Receptor[1]
In Vitro	KW-8232 is an anti-osteoporotic agent. KW-8232 reduces the biosynthesis of PGE_2 in mouse osteoblastic cells[1]. KW-8232 possesses anti-viral activity against SARS-CoV-2 (EC_{50} ~1.2 μM)[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	KW-8232 (3, 10, 30 mg/kg, p.o.) potently increases the femoral bone mineral density (BMD) of immobilized legs of rats, and affects immobilization-induced abnormal bone turnovrer. KW-8232 markedly decreases urinary calcium excreation in the neurectomized rats only at 30 mg/kg, and highly reduces urinary pyridinoline and deoxypyridionline excretion which are markers of bone resorption in neurectomized rats. KW-8232 inhibits bone loss may be attributed to the lower prostaglandins (PGs)-stimulated bone resorption via regulation of PGE2 production[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	male Sprague-Dawley rats (5-week-old)[1].
Dosage:	1, 3, 10, and 30 mg/kg.
Administration:	Orally once daily beginning 1 day prior to neurectomy for 28 days.
Result:	Decreased urinary calcium excreation in the neurectomized rats only at 30 mg/kg.

REFERENCES

[1]. Uchii M, et al. Effect of KW-8232, a novel anti-osteoporotic agent, on bone loss in sciatic neurectomized rats. Jpn J Pharmacol. 1998 Oct;78(2):241-3.

[2]. Shiwei Wang, et al. A Transferable Deep Learning Approach to Fast Screen Potent Antiviral Drugs against SARS-CoV-2. bioRxiv. 2020.

Caution: Product has not been fully validated for medical applications. For research use only.

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