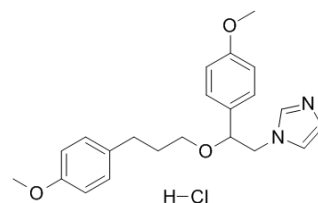


Data Sheet

Product Name:	SKF-96365 (hydrochloride)
Cat. No.:	HY-100001
CAS No.:	130495-35-1
Molecular Formula:	C ₂₂ H ₂₇ ClN ₂ O ₃
Molecular Weight:	402.91
Target:	Autophagy; TRP Channel
Pathway:	Autophagy; Membrane Transporter/Ion Channel
Solubility:	DMSO: ≥ 30 mg/mL



BIOLOGICAL ACTIVITY:

SKF-96365 hydrochloride, a potent **TRP Channel** blocker, exhibits potent anti-neoplastic activity by inducing cell-cycle arrest and apoptosis in colorectal cancer cells.

IC50 & Target: TRP Channel^[1]

In Vitro: SKF-96365 exhibits potent anti-neoplastic activity by inducing cell-cycle arrest and apoptosis in colorectal cancer cells.

SKF-96365 inhibits hERG current in a concentration-dependent manner^[1]. SKF-96365 can induce cytoprotective autophagy to delay apoptosis by preventing the release of cytochrome c (cyt c) from the mitochondria into the cytoplasm. Mechanistically, SKF-96365 treatment inhibits the calcium/calmodulin-dependent protein kinase IIγ (CaMKIIγ)/AKT signaling cascade. Overexpression of CaMKIIγ or AKT abolishes the effects of SKF-96365 on cancer cells, suggesting a critical role of the CaMKIIγ/AKT signaling pathway in SKF-96365-induced biological effects^[2].

In Vivo: SKF-96365 inhibits CRC cell growth *in vivo*. SKF-96365 treatment results in a decrease of p-CaMKII and p-AKT as well as an increase in LC3-II, cleaved PARP, caspase-3, and caspase-9 in mice^[2].

PROTOCOL (Extracted from published papers and Only for reference)

Animal Administration: SKF-96365 is prepared in saline.^[2] Mice: Five to six-week-old female athymic BALB/c mice are inoculated into the right oxtar with HCT116 cells. When the diameter of the subcutaneous tumor reaches approximately 0.5 cm, animals are randomly assigned to the vehicle, SKF-96365 alone, HCQ alone or SKF-96365+HCQ. SKF-96365 is applied (20 mg/kg) and HCQ is applied (60 mg/kg) daily for 14 successive days by i.p. injection. Tumor sizes and volume are determined. Eight mice are included in each group. Mice are sacrificed 24 h after the last treatment. The tumors are weighed and processed for western blot analysis or paraffin embedding^[2].

References:

[1]. Liu H, et al. SKF-96365 blocks human ether-à-go-go-related gene potassium channels stably expressed in HEK 293 cells. *Pharmacological Research*. Pharmacol Res, 2016 Feb, 104:61-9.

[2]. Jing Z, et al. SKF-96365 activates cytoprotective autophagy to delay apoptosis in colorectal cancer cells through inhibition of the calcium/CaMKIIγ/AKT-mediated pathway. *Cancer Lett*, 2016 Mar 28, 372(2):226-38.

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

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