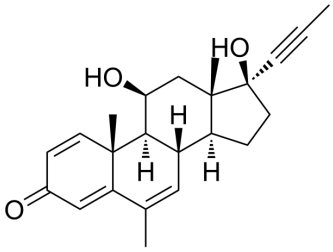
RU28362

Cat. No.:	HY-121859
CAS No.:	74915-64-3
Molecular Formula:	$C_{23}H_{28}O_3$
Molecular Weight:	352.47
Target:	Glucocorticoid Receptor
Pathway:	Immunology/Inflammation; Vitamin D Related/Nuclear Receptor
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

RU28362 is a potent and selective glucocorticoid agonist. RU28362 increases the Bnip3 mRNA levels in neurons. RU28362 inhibits adrenocorticotrophic hormone (ACTH) and corticosterone secretion[1][2]. RU28362 is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.

In Vitro

RU28362 (0.1, 1, 5, 10 nM; 72 h) increases the Bnip3 mRNA levels in a dose-dependent manner after 72 h in neurons[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

RT-PCR[1]

Cell Line:	Primary cortical neurons
Concentration:	0.1, 1.0, 5.0, 10.0 nM
Incubation Time:	48, 72 h
Result:	Significantly increased the Bnip3 mRNA levels in a dose-dependent manner after 72 h, Bnip3 mRNA levels were not changed after treatment with RU28362 for 48 h.

In Vivo

RU28362 (150 μg/kg; i.p.) inhibits adrenocorticotrophic hormone (ACTH) and corticosterone secretion and selectively suppressed the stress-induced increase in POMC hnRNA in the anterior pituitary gland[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	250-350 g, adult male Sprague-Dawley rats[2]
Dosage:	150 μg/kg
Administration:	I.p.; 60 min before exposure to a 15-min period of restraint stress
Result:	Inhibited adrenocorticotrophic hormone (ACTH) and corticosterone secretion and selectively suppressed the stress-induced increase in POMC hnRNA in the anterior pituitary gland.

REFERENCES

[1]. Sandau US, et al. Glucocorticoids exacerbate hypoxia-induced expression of the pro-apoptotic gene Bnip3 in the developing cortex. Neuroscience. 2007 Jan 19;144(2):482-94.

[2]. Ginsberg AB, et al. Specific and time-dependent effects of glucocorticoid receptor agonist RU28362 on stress-induced pro-opiomelanocortin hnRNA, c-fos mRNA and zif268 mRNA in the pituitary. J Neuroendocrinol. 2006 Feb;18(2):129-38.

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