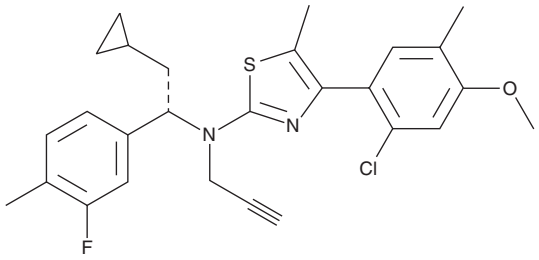
PRODUCT INFORMATION

Crinecerfont

Item No. 45039

CAS Registry No.: 752253-39-7
Formal Name: 4-(2-chloro-4-methoxy-5-methylphenyl)-N-[(1S)-2-cyclopropyl-1-(3-fluoro-4-methylphenyl) ethyl]-5-methyl-N-2-propyn-1-yl-2-thiazolamine
Synonyms: NBI 74788, SSR 125543
MF: $C_{27}H_{28}ClFN_2OS$
FW: 483.0
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Special Conditions: Protect from light



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Crinecerfont is supplied as a solid. A stock solution may be made by dissolving the crinecerfont in the solvent of choice, which should be purged with an inert gas. Crinecerfont is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Description

Crinecerfont is an antagonist of corticotropin-releasing factor receptor 1 (CRF_1; K_i = 1.9 nM).[1] It is selective for CRF_1 over $CRF_{2\alpha}$ and a panel of 125 receptors, transporters, ion channels, and enzymes at 10 µM. Crinecerfont inhibits CRF-induced cAMP production in Y79 retinoblastoma cells (IC_{50} = 3 nM) and CRF-induced adrenocorticotropic hormone (ACTH) secretion in AtT-20 mouse pituitary tumor cells when used at concentrations of 3, 30, and 100 nM. *In vivo*, crinecerfont (10 mg/kg, p.o.) prevents restraint stress-induced increases in plasma ACTH levels in rats. It increases punished responding in the Vogel punished drinking task, indicating anxiolytic-like activity, in mice and decreases immobility time in the forced swim test in rats.[2] Crinecerfont (30 mg/kg) decreases cumulative weight gain and increases protein gain in *fa/fa* obese but not lean rats.[3] Formulations containing crinecerfont have been used as an adjunct to glucocorticoids in the treatment of classic congenital adrenal hyperplasia (CAH), an inborn error of metabolism characterized by a deficiency in steroid 21-hydroxylase, also known as cytochrome P450 isoform 21 (CYP21).

References

1. Gully, D., Geslin, M., Serva, L., *et al.* 4-(2-Chloro-4-methoxy-5-methylphenyl)-N-[(1S)-2-cyclopropyl-1-(3-fluoro-4-methylphenyl)ethyl]5-methyl-N-(2-propynyl)-1,3-thiazol-2-amine hydrochloride (SSR125543A): A potent and selective corticotrophin-releasing factor$_1$ receptor antagonist. I. Biochemical and pharmacological characterization. *J. Pharmacol. Exp. Ther.* **301(1),** 322-332 (2002).
2. Griebel, G., Simiand, J., Steinberg, R., *et al.* 4-(2-Chloro-4-methoxy-5-methylphenyl)-N-[(1S)-2-cyclopropyl-1-(3-fluoro-4-methylphenyl)ethyl]5-methyl-N-(2-propynyl)-1, 3-thiazol-2-amine hydrochloride (SSR125543A), a potent and selective corticotrophin-releasing factor$_1$ receptor antagonist. II. Characterization in rodent models of stress-related disorders. *J. Pharmacol. Exp. Ther.* **301(1),** 333-345 (2002).
3. Doyon, C., Samson, P., Lalonde, J., *et al.* Effects of the CRF_1 receptor antagonist SSR125543 on energy balance and food deprivation-induced neuronal activation in obese Zucker rats. *J. Endocrinol.* **193(1),** 11-19 (2007).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM