Product Name: BMS-564929

Revision Date: 6/30/2016

Product Data Sheet

Chemical Properties

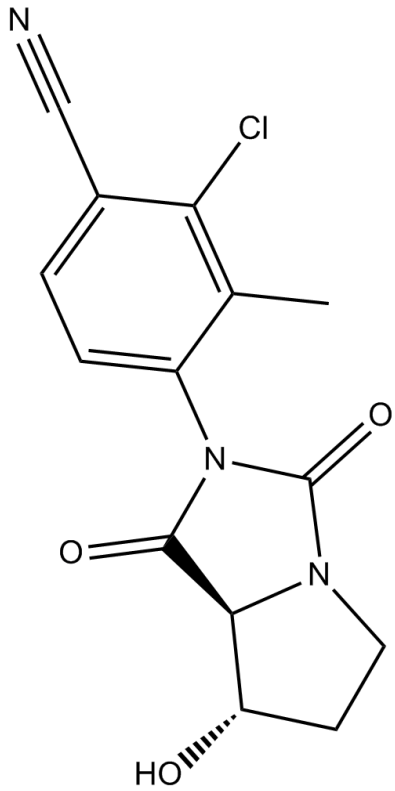
Product Name: BMS-564929

Cas No.: 627530-84-1

M.Wt: 305.72

Formula: C14H12ClN3O3

Synonyms: BMS 564929;BMS564929



Chemical Name: 4-[(7R,7aS)-7-hydroxy-1,3-dioxo-5,6,7,7a-tetrahydropyrrolo[1,2-c]imidazol-2-yl]-2-chloro-3-methylbenzonitrile

Canonical SMILES: CC1=C(C=CC(=C1Cl)C#N)N2C(=O)C3C(CCN3C2=O)O

Solubility: Soluble in DMSO

Storage: Store at -20°C

General tips: For obtaining a higher solubility , please warm the tube at 37° C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20° C for several months.

Shopping Condition: Evaluation sample solution : ship with blue ice
All other available size: ship with RT , or blue ice upon request

Biological Activity

Targets : Endocrinology and Hormones

Pathways: Androgen Receptor

Description:

BMS-564929 is a selective androgen receptor (AR) modulator with Ki value of 2.11 ± 0.16 nM [1]. The AR is a type of nuclear receptor that is activated by the androgenic hormones, testosterone, or dihydrotestosterone. The important function is regulating gene expression.
BMS-564929 is a muscle-tissue specific agonist for AR with a bicyclic hydantoin structure [2]. BMS-564929 is about 400-fold selective for AR vs. PR and more than 1000-fold selective for AR vs. GR, MR and ERα and β. In the C2C12 myoblast cell line, BMS-564929 shows a potency of 0.44 ± 0.03 nM compared with 2.81 ± 0.48 nM measured for testosterone [1].
In castrated male rats, BMS-564929 is substantially more potent than testosterone (T) in promoting the growth of the levator ani muscle, and is highly selective for muscle vs. Prostate. Because of its potent oral activity and tissue selectivity, BMS-564929 is expected to yield beneficial clinical effects in muscle and other tissues with a more favorable safety way [1].

***Reference**:*

[1]. Ostrowski J, Kuhns JE, Lupisella JA, et al. Pharmacological and x-ray structural characterization of a novel selective androgen receptor modulator: potent hyperanabolic stimulation of skeletal muscle with hypostimulation of prostate in rats. Endocrinology, 2007, 148(1): 4-12.
[2]. Thevis M, Kohler M, Thomas A, et al. Determination of benzimidazole- and bicyclic hydantoin-derived selective androgen receptor antagonists and agonists in human urine using LC-MS/MS. Anal Bioanal Chem, 2008, 391(1): 251-261.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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