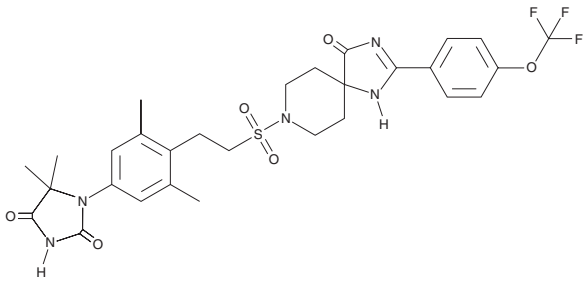
PRODUCT INFORMATION

PCO371

Item No. 39182

CAS Registry No.: 1613373-33-3
Formal Name: 1-[3,5-dimethyl-4-[2-[[4-oxo-2-[4-(trifluoromethoxy)phenyl]-1,3,8-triazaspiro[4.5]dec-1-en-8-yl]sulfonyl]ethyl]phenyl]-5,5-dimethyl-2,4-imidazolidinedione
MF: $C_{29}H_{32}F_3N_5O_6S$
FW: 635.7
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

PCO371 is supplied as a solid. A stock solution may be made by dissolving the PCO371 in the solvent of choice, which should be purged with an inert gas. PCO371 is soluble in methanol.

Description

PCO371 is a parathyroid hormone receptor type 1 (PTH1R) agonist.[1] It selectively induces cAMP production in COS-7 cells expressing human PTH1R (EC_{50} = 2.4 µM) over COS-7 cells expressing human PTH2R (EC_{50} = > 100 µM). PCO371 (1 and 3 µM) induces calcium release from isolated fetal rat long bones. It increases lumbar spine and proximal femur bone mineral density (BMD), lumbar spine bone strength, serum levels of osteocalcin, and bone formation in the lumbar spine without affecting serum calcium levels in an ovariectomized (OVX) rat model of osteopenia when administered at a dose of 10 mg/kg per day. PCO371 (9 mg/kg) increases serum, but not urinary, calcium levels in a hypocalcemic thyroparathyroidectomized (TPTX) rat model of hypothyroidism.

References

1. Tamura, T., Noda, H., Joyashiki, E., *et al.* Identification of an orally active small-molecule PTHR1 agonist for the treatment of hypoparathyroidism. *Nat. Commun.* **7**, 13384 (2016).

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