

## **Data Sheet**

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 Product Name
 :
 AS2690168

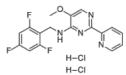
 Cat. No.
 :
 PC-73378

 CAS No.
 :
 1393899-47-2

 Molecular Formula
 :
 C<sub>17</sub>H<sub>15</sub>Cl<sub>2</sub>F<sub>3</sub>N<sub>4</sub>O

Molecular Weight : 419.229 Target : NF-κΒ

**Solubility** : 10 mM in DMSO



## **Biological Activity**

AS2690168 is a novel orally available, selective **RANKL signal transductio**n inhibitor, reduces TRAP staining of sRANKL-stimulated RAW264 cells with IC50 of 0.28 uM, suppresses RANKL-induced osteoclastogenesis.

AS2690168 suppressed soluble RANKL (sRANKL)-induced NFATc1 mRNA expression in RAW264 cells with 37.1% and 98.9% inhibition at 0.3 and 3.0 uM, respectively.

AS2690168 also suppressed calcium release from parathyroid hormone-stimulated mouse calvaria with an IC50 value of 0.46 uM.

AS2690168 (3 mg/kg, p.o.) completely suppressed the decrease in femoral bone mineral content in an sRANKL-induced osteopenic mice model, also significantly suppressed the decrease in femoral bone mineral density and increase in serum tartrate-resistant acid phosphatase-5b levels in ovariectomized rats at doses of 0.3, 1 and 3 mg/kg.

AS260168 suppressed the increase in urine deoxypyridinoline in a rat prednisolone-induced osteoporosis model at  $10\,\mathrm{mg/kg}$ .

## References

Morikawa N, et al. *Eur J Pharmacol*. 2022 Apr 6:174941.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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