

# PRODUCT INFORMATION



## DPC-AJ1951 (trifluoroacetate salt)

Item No. 25343

**Formal Name:** 2-methylalanyl-L-valyl-2-methylalanyl-L- $\alpha$ -glutamyl-L-isoleucyl-L-glutamyl-L-leucyl-L-norleucyl-L-histidyl-L-glutamyl-L-arginyl-L-alanyl-L-lysyl-L-tyrosinamide, trifluoroacetate salt

**MF:**  $C_{76}H_{127}N_{23}O_{19} \cdot XCF_3COOH$

**FW:** 1,667.0

**Purity:**  $\geq 95\%$

**Supplied as:** A solid

**Storage:**  $-20^{\circ}C$

**Stability:**  $\geq 4$  years

Aib — Val — Aib — Glu — Ile — Gln — Leu — Nle — His — Gln —

Arg — Ala — Lys — Tyr —  $NH_2$

•  $XCF_3COOH$

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

### Laboratory Procedures

DPC-AJ1951 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the DPC-AJ1951 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. DPC-AJ1951 (trifluoroacetate salt) is slightly soluble in DMSO.

DPC-AJ1951 (trifluoroacetate salt) is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

DPC-AJ1951 is a peptide agonist of the parathyroid hormone (PTH)/PTH-related peptide receptor (PPR;  $EC_{50} = 0.15$  nM in HEK293 cells expressing human PPR).<sup>1</sup> It induces cAMP production in SAOS-2 and UMR106 cells that endogenously express human and rat PPR, respectively ( $EC_{50}s = 2.2$  and  $1.1$  nM, respectively). DPC-AJ1951 stimulates osteoclast-mediated bone resorption in fetal rat long-bone explant cultures and increases collagen synthesis and cell proliferation in neonatal mouse parietal bone explants. *In vivo*, DPC-AJ1951 normalizes serum calcium levels in thyroidparathyroidectomized rats.

### Reference

1. Carter, P.H., Liu, R.-Q., Foster, W.R., *et al.* Discovery of a small molecule antagonist of the parathyroid hormone receptor by using an N-terminal parathyroid hormone peptide probe. *Proc. Natl. Acad. Sci. USA* **104**(16), 6846-6851 (2007).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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