

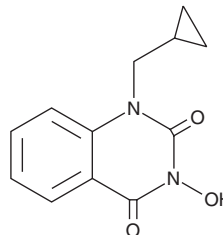
# PRODUCT INFORMATION



## FEN1-IN-4

Item No. 37790

**CAS Registry No.:** 1995893-58-7  
**Formal Name:** 1-(cyclopropylmethyl)-3-hydroxy-2,4(1H,3H)-quinazolinone  
**Synonyms:** FEN1 Inhibitor 4, Flap Endonuclease 1-IN-4, Flap Endonuclease 1 Inhibitor 4  
**MF:** C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>O<sub>3</sub>  
**FW:** 232.2  
**Purity:** ≥98%  
**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

FEN1-IN-4 is supplied as a solid. A stock solution may be made by dissolving the FEN1-IN-4 in the solvent of choice, which should be purged with an inert gas. FEN1-IN-4 is soluble in methanol.

### Description

FEN1-IN-4 is an inhibitor of flap endonuclease 1 (FEN1; IC<sub>50</sub> = 30 nM for FEN1-336Δ).<sup>1</sup> It also inhibits exonuclease 1 in a concentration-dependent manner. FEN1-IN-4 (10 μM) inhibits ATP-induced mitochondrial DNA (mtDNA) fragmentation and levels of cytosolic mtDNA in LPS-primed primary mouse bone marrow-derived macrophages (BMDMs).<sup>2</sup> It also inhibits ATP-induced phosphorylation of STING in LPS-primed wild-type and *Nlrp3*<sup>-/-</sup> primary mouse BMDMs. FEN1-IN-4 (40 mg/kg) decreases peritoneal levels of IL-1β and neutrophil and monocyte infiltration in a mouse model of alum-induced peritonitis.

### References

1. Exell, J.C., Thompson, M.J., Finger, L.D., *et al.* Cellularly active *N*-hydroxyurea FEN1 inhibitors block substrate entry to the active site. *Nat. Chem. Biol.* **12(10)**, 815-821 (2016).
2. Xian, H., Watari, K., Sanchez-Lopez, E., *et al.* Oxidized DNA fragments exit mitochondria via mPTP- and VDAC-dependent channels to activate NLRP3 inflammasome and interferon signaling. *Immunity* **55(8)**, 1370-1385 (2022).

#### 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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