# **PRODUCT** INFORMATION



## NF-κB Activation Inhibitor III

Item No. 19083

CAS Registry No.: Formal Name:	380623-76-7 3-chloro-4-nitro-N-(5-nitro-2- thiazolyl)-benzamide	CI NO <sub>2</sub>
Synonym:	SM-7368	H I
MF:	C <sub>10</sub> H <sub>5</sub> ClN <sub>4</sub> O <sub>5</sub> S	
FW:	328.7	
Purity:	≥99%	∖∖ _s o
Supplied as:	A solid	$\sum$
Storage:	-20°C	O <sub>2</sub> N
Stability:	≥4 years	-

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

## Description

NF-κB activation inhibitor III is an inhibitor of NF-κB activation.<sup>1</sup> NF-κB activation inhibitor III (20 μM) inhibits TNF- $\alpha$ -induced NF- $\kappa$ B activation in HT-1080 fibrosarcoma cells.<sup>1</sup> NF- $\kappa$ B activation inhibitor III inhibits TNF- $\alpha$ -induced expression of the gene encoding matrix metalloproteinase-9 (MMP-9) in HT-1080 cells in a concentration-dependent manner and decreases TNF- $\alpha$ -induced migration of HT-1080 cells. It inhibits IL-6 release induced by TNF- $\alpha$  from primary rat brain pericytes when used at concentrations of 1, 5, and 10  $\mu$ M.<sup>2</sup> NF- $\kappa$ B activation inhibitor III (5  $\mu$ M) increases IL-8 secretion in HT-29 and Caco-2 colon cancer cells when used in combination with glyoxal.<sup>3</sup>

## References

- 1. Lee, H.Y., Park, K.S., Kim, M.-K., et al. A small compound that inhibits tumor necrosis factor- $\alpha$ -induced matrix metalloproteinase-9 upregulation. Biochem. Biophys. Res. Commun. 336(2), 716-722 (2005).
- 2. Matsumoto, J., Dohgu, S., Takata, F., et al. TNF-α-sensitive brain pericytes activate microglia by releasing IL-6 through cooperation between IkB-NFkB and JAK-STAT3 pathways. Brain Res. 1692, 34-44 (2018).
- 3. Kuntz, S., Kunz, C., and Rudloff, S. Carbonyl compounds methylglyoxal and glyoxal affect interleukin-8 secretion in intestinal cells by superoxide anion generation and activation of MAPK p38. Mol. Nutr. Food Res. 54(10), 1458-1467 (2010).

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

### SAFFTY 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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