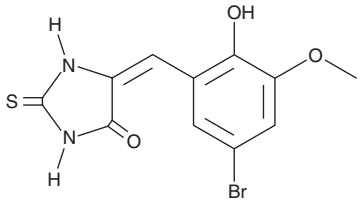
PRODUCT INFORMATION

(E/Z)-IT-603

Item No. 37792

CAS Registry No.:	292168-90-2
Formal Name:	5-[(5-bromo-2-hydroxy-3-methoxyphenyl)methylene]-2-thioxo-4-imidazolidinone
MF:	$C_{11}H_9BrN_2O_3S$
FW:	329.2
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

(E/Z)-IT-603 is supplied as a solid. A stock solution may be made by dissolving the (E/Z)-IT-603 in the solvent of choice, which should be purged with an inert gas. (E/Z)-IT-603 is soluble in DMSO.

Description

(E/Z)-IT-603 is a c-Rel inhibitor (IC_{50} = 3 µM).[1] It inhibits c-Rel DNA binding to the *IL2* promoter in an EMSA. (E/Z)-IT-603 reduces the proliferation of OCI-Ly3 diffuse large B cell lymphoma cells (IC_{50} = 18 µM). It reduces Huh7 epithelial carcinoma spheroid growth when used at a concentration of 20 µM in combination with the anthracycline antitumor antibiotic doxorubicin (Item No. 15007).[2] Preincubation of (E/Z)-IT-603 (20 µM) with murine T cells co-administered with A20 murine lymphoma cells to lethally irradiated mice as a model of T cell-depleted bone marrow transplantation reduces allo-stimulation without affecting anticancer T cell responses and increases survival.[1] *In vivo*, (E/Z)-IT-603 (24 mg/kg every other day), when used in combination with doxorubicin, reduces hepatic tumor burden, increases $CD8^+$ T cell and $F4/80^+$ macrophage tumor infiltrates, and increases tumoral mRNA encoding chemokine (C-X-C motif) ligand 9 (Cxcl9) in a Hep-53.4 murine hepatocellular carcinoma model.[2]

References

1. Shono, Y., Tuckett, A.Z., Ouk, S., *et al.* A small-molecule c-Rel inhibitor reduces alloactivation of T cells without compromising antitumor activity. *Cancer Discov.* **4(5)**, 578-591 (2014).
2. Leslie, J., Hunter, J.E., Collins, A., *et al.* c-Rel-dependent Chk2 signaling regulates the DNA damage response limiting hepatocarcinogenesis. *Hepatology* **78(4)**, 1050-1063 (2023).

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