# PRODUCT INFORMATION



# **VER-50589**

Item No. 13132

CAS Registry No.: 747413-08-7

Formal Name: 5-(5-chloro-2,4-dihydroxyphenyl)-

N-ethyl-4-(4-methoxyphenyl)-3-

isoxazolecarboxamide

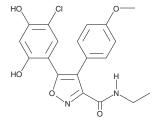
MF: C<sub>19</sub>H<sub>17</sub>CIN<sub>2</sub>O<sub>5</sub>

388.8 FW: ≥98% **Purity:** 

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

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



### Description

The heat shock proteins (Hsps) act as molecular chaperones. Hsp90 is an abundant protein with roles in protein folding, cell signaling, and cancer. VER-50589 is an isoxazole compound that inhibits Hsp90 with an  $IC_{50}$  value of 21 nM. $^{1}$  It produces a mean cellular antiproliferative  $GI_{50}$  value of 78 nM when tested against a human cancer cell line panel. Consistent with inhibition of Hsp90, VER-50589 induces the expression of Hsp27 and Hsp72 while reducing the client proteins c-Raf, B-Raf, survivin, and PRMT5, causing cell cycle arrest and apoptosis. VER-50589 shows favorable pharmacokinetics and impairs tumor growth in animals. 1 Importantly, glioblastoma cells do not acquire resistance to VER-50589 and resistance to other Hsp90 inhibitors does not produce cross-resistance to VER-50589.<sup>2</sup>

### References

- 1. Sharp, S.Y., Prodromou, C., Boxall, K., et al. Inhibition of the heat shock protein 90 molecular chaperone in vitro and in vivo by novel, synthetic, potent resorcinylic pyrazole/isoxazole amide analogues. Mol. Cancer Ther. 6(4), 1198-1211 (2007).
- 2. Gaspar, N., Sharp, S.Y., Pacey, S., et al. Acquired resistance to 17-allylamino-17-demethoxygeldanamycin (17-AAG, tanespimycin) in glioblastoma cells. Cancer Res. 69(5), 1966-1975 (2009).

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

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.

# WARRANTY AND LIMITATION OF REMEDY

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