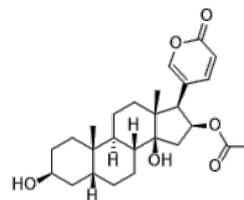


<b>Product Name</b>	: Bufotalin
<b>Cat. No.</b>	: PC-26260
<b>CAS No.</b>	: 471-95-4
<b>Molecular Formula</b>	: C <sub>26</sub> H <sub>36</sub> O <sub>6</sub>
<b>Molecular Weight</b>	: 444.57
<b>Target</b>	: Other Targets
<b>Solubility</b>	: 10 mM in DMSO



## Biological Activity

Bufotalin is a steroid lactone isolated from *Venenum Bufonis* with potently antitumor activities, a selective and potent inhibitor of COL1A1-high NSCLC.

Bufotalin shows inhibitory effect on the viability of doxorubicin-induced multidrug resistant liver cancer cells (R-HepG2) than that of their parent cells HepG2.

Bufotalin induces cell cycle arrest at G(2)/M phase through down-regulation of Aurora A, CDC25, CDK1, cyclin A and cyclin B1, as well as up-regulation of p53 and p21.

Bufotalin significantly inhibited the growth of xenografted R-HepG2 cells.

Bufotalin physically engages COL1A1, triggering its post-transcriptional down-regulation and concomitantly crippling malignant fitness.

Bufotalin simultaneously disables the PTEN/AKT/mTOR and Ras/MEK/ERK cascades, enforces G2-M arrest via Cyclin B1/CDK1 dysregulation, and quells epithelial-to-mesenchymal transition by restoring E-cadherin while repressing N-cadherin, MMP3, and MMP9.

## References

Zhang Y, et al. *Eur J Pharmacol.* 2026 Feb 15;1015:178601.

Zhu Z, et al. *Aging (Albany NY).* 2024 May 28;16(10):9264-9279.

Zhang DM, et al. *Eur J Pharmacol.* 2012 Oct 5;692(1-3):19-28.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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