# KSI-3716-d4

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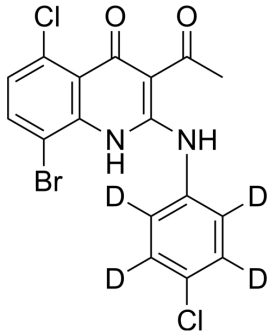
| **Cat. No.:** | HY-12703S |
| **Molecular Formula:** | $C_{17}H_7D_4BrCl_2N_2O_2$ |
| **Molecular Weight:** | 430.12 |
| **Target:** | Isotope-Labeled Compounds |
| **Pathway:** | Others |
| **Storage:** | Please store the product under the recommended conditions in the Certificate of Analysis. |




## BIOLOGICAL ACTIVITY

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| **Description** | KSI-3716-d4 is the deuterium labeled KSI-3716 (HY-12703)[1][2]. |
| **In Vitro** | Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1].<br>KSI-3716 blocks c-MYC/MAX from forming a complex with target gene promoters. KSI-3716 effectively blocks complex formation in a dose dependent manner ($IC_{50}$=0.84 μM). c-MYC mediated transcriptional activity is inhibited by KSI-3716 at concentrations as low as 1 μM. The expression of c-MYC target genes, such as cyclin D2, CDK4 and hTERT, is markedly decreased. KSI-3716 exerts cytotoxic effects on bladder cancer cells by inducing cell cycle arrest and apoptosis[2].<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

## REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

[2]. Jeong KC, et al. Intravesical instillation of c-MYC inhibitor KSI-3716 suppresses orthotopic bladder tumor growth. J Urol. 2014 Feb;191(2):510-8.



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