Product Data Sheet

Product Name: Temozolomide-^{15}N
Cat. No.: GC81890

Chemical Properties

Cas. No.			
Formula	$C_6H_6N_5{}^{15}NO_2$	M.Wt	195.14
Solubility		Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Temozolomide - 15 N (NSC 362856- 15 N) is the 15 N-labeled Temozolomide. Temozolomide (NSC 362856) is an oral active DNA alkylating agent that crosses the blood-brain barrier. Temozolomide is also a proautophagic and proapoptotic agent. Temozolomide is effective against tumor cells that are characterized by low levels of O6-alkylguanine DNA alkyltransferase (OGAT) and a functional mismatch repair system. Temozolomide has antitumor and antiangiogenic effects [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.

References:

[1]. Tentori L, et al. Combined treatment with temozolomide and poly(ADP-ribose) polymerase inhibitor enhances survival of mice bearing hematologic malignancy at the central nervous system site. Blood. 2002 Mar 15;99(6):2241-4.
[2]. Mathieu V, et al. Combining Anti-Human VEGF with temozolomide increases the antitumor efficacy of temozolomide in a human glioblastoma orthotopic xenograft model. Neoplasia. 2008 Dec;10(12):1383-92.
[3]. Perazzoli G, et al. Temozolomide Resistance in Glioblastoma Cell Lines: Implication of MGMT, MMR, P-Glycoprotein and CD133 Expression. PLoS One. 2015 Oct 8;10(10):e0140131.

Caution: Product has not been fully validated for medical applications. For research use only.
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