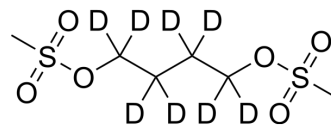


Busulfan-d8

Cat. No.:	HY-B0245S		
CAS No.:	116653-28-2		
Molecular Formula:	C ₆ H ₆ D ₈ O ₆ S ₂		
Molecular Weight:	254.35		
Target:	DNA Alkylator/Crosslinker; Apoptosis		
Pathway:	Cell Cycle/DNA Damage; Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description

Busulfan-d₈ is a deuterium labeled Busulfan. Busulfan is a potent alkylating antineoplastic agent. Busulfan causes DNA damage by cross-linking DNAs and DNA and proteins. Busulfan inhibits thioredoxin reductase. Busulfan induces apoptosis. Busulfan is an immunosuppressive and myeloablative chemotherapeutic agent[1][2][3].

REFERENCES

- [1]. Virginia Probin, et al. Busulfan-induced senescence is dependent on ROS production upstream of the MAPK pathway. *Free Radic Biol Med.* 2007 Jun 15;42(12):1858-65.
- [2]. Mattan Levi, et al. Treosulfan induces distinctive gonadal toxicity compared with busulfan. *Oncotarget.* 2018 Apr 10;9(27):19317-19327.
- [3]. Janka Reimer, et al. Antineoplastic agent busulfan regulates a network of genes related to coagulation and fibrinolysis. *Eur J Clin Pharmacol.* 2012 Jun;68(6):923-35.

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

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