

Fomivirsen sodium

Cat. No.:	HY-109528
CAS No.:	160369-77-7
Target:	CMV
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

Fomivirsen (sodium)

BIOLOGICAL ACTIVITY

Description	Fomivirsen sodium is an antisense 21 mer phosphorothioate oligonucleotide. Fomivirsen is an antiviral agent that is used cytomegalovirus retinitis (CMV) research, including in AIDs. Fomivirsen sodium binds to and degrades the mRNAs encoding CMV immediate-early 2 protein (required for viral replication), thus providing bioactive effects for CMV retinitis by inhibition of virus proliferation ^[1] .
In Vitro	Antisense oligonucleotide acts a complementary nucleotide to the messenger RNA of the major immediate-early region proteins of human cytomegalovirus, it disrupts the replication of the virus through an antisense mechanism ^[1] . Fomivirsen is 21-mer phosphorothioate ASO with CpG motif near its 5' end, with the sequence 5'-GCG TTT GCT CTT CTT CTT GCG-3', resulting in mRNA degradation by RNase H-mediated mechanism ^[2] . Fomivirsen inhibits CMV replication in human retinal pigment epithelial (RPE) cells and in human fibroblast cells (MRC-5 cells) in a dose-dependent manner. The mean IC ₅₀ are 0.03 μM for RPE cells and 0.2 μM for MRC5 cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. M D de Smet, et al. Fomivirsen- a phosphorothioate oligonucleotide for the treatment of CMV retinitis. Ocul Immunol Inflamm. 1999 Dec;7(3-4):189-98.

[2]. Anna Kilanowska, et al. In vivo and in vitro studies of antisense oligonucleotides – a review. (Review Article) RSC Adv., 2020, 10, 34501-34516

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA