Zidovudine

Other names:	3'-Azido-3'-deoxythymidine
	AZT
	Azidothymidine
	Thymidine, 3'-azido-3'-deoxy-
	BW-A 509U
	Retrovir
	3'-Azidothymidine
	3-Azido-3-deoxythymidine
	Aztec
	Compound S
	ZDV
	ZVD
	NSC 602670
	3'-Azido-2,3'-dideoxythymidine (zidovudine)
Inchi:	InChI=1S/C10H13N5O4/c1-5-3-15(10(18)12-9(5)17)8-2-6(13-14-11)7(4-16)19-8/h3,6-8,1
InchiKey:	HBOMLICNUCNMMY-UHFFFAOYSA-N
Formula:	C10H13N5O4
SMILES:	Cc1cn(C2CC(N=[N+]=[N-])C(CO)O2)c(=O)[nH]c1=O
Mol. weight [g/mol]:	267.24
CAS:	30516-87-1

Physical Properties

Property code	Value	Unit	Source
log10ws	-5.55		Crippen Method
logp	-0.678		Crippen Method
mcvol	181.920	ml/mol	McGowan Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	33.03	kJ/mol	359.80	NIST Webbook

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C30516871&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

hfust:	Enthalpy of fusion at a given temperature
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume

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