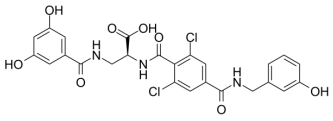
XVA143

Cat. No.:	HY-139202
CAS No.:	264275-77-6
Molecular Formula:	$C_{25}H_{21}Cl_2N_3O_8$
Molecular Weight:	562.36
Target:	Integrin
Pathway:	Cytoskeleton
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

XVA143, an α/β I-like allosteric antagonist, inhibits LFA-1 dependent firm adhesion, while at the same time it enhances adhesion in shear flow and rolling both in vitro and in vivo[1].

In Vitro

XVA143 (1 μM) completely abolishes binding of ICAM-1 to LFA-1 in Mn^{2+} and Mg^{2+}/EGTA, with no hint of agonism[1].XVA143 restores rolling of the α_L-E310A β_2 mutant by inducing extension of α_L[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	K562 cells.
Concentration:	0, 0.2, 0.5 and 1 μM.
Incubation Time:	
Result:	Potent against the weakest activator (2 mM Mg^{2+}/1 mM EGTA, IC_{50} ~10^{-3} nM) and least potent against the strongest activator (1 mM Mn^{2+}, IC_{50} ~10^{-3} nM).

Cell Viability Assay[1]

Cell Line:	Wild-type murine lymphocytes[1].
Concentration:	100 μM.
Incubation Time:	
Result:	Induced a 50% increase in rolling fraction compared to vehicle-treated control cells ((from 27±5% to 41±7%).

REFERENCES

[1]. Azucena Salas, et al. Rolling adhesion through an extended conformation of integrin alphaLbeta2 and relation to alpha I and beta I-like domain interaction. Immunity. 2004 Apr;20(4):393-406.

[2]. Mélanie R Tardif, et al. LFA-1 antagonists as agents limiting human immunodeficiency virus type 1 infection and transmission and potentiating the effect of the fusion inhibitor T-20. Antimicrob Agents Chemother. 2009 Nov;53(11):4656-66.

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