
Product Data Sheet

Product Name: Direct Violet 1

Cat. No.: GC61677

Chemical Properties

Cas. No. 2586-60-9

SMILES O=S(C1=CC(O)=C2C(/N=N/C3=CC=C(C4=CC=C(/N=N/C5=C(N)C=CC6=CC(S(=O)(O[Na])=O)=CC(O)=C56)C=C4)C=C3)=C(N)C=CC2=C1)(O[Na])=O

Formula $C_{32}H_{22}N_6Na_2O_8S_2$ M.Wt 728.66

Solubility Water: 62.5 mg/mL (85.77 mM) 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 Condition, or blue ice upon request.

Structure **Background**

Direct Violet 1, an azo dye, is a textile dye. Direct Violet 1 is also the protein-protein interaction (PPI) between the SARS-CoV-2 spike protein and ACE2 inhibitor with IC50s of 1.47-2.63 μM[1][2].

Direct Violet 1 inhibits SARS-CoV-2-S-RBD binding to human ACE2, inhibits SARS-CoV-S1S2 binding to ACE2, and inhibits TNF-R1 binding to TNFα with IC50 values of 1.47 μM, 2.63 μM, and 2.11 μM, respectively[1]. Direct Violet 1 inhibits SARS-CoV-2 pseudovirus entry into hACE2 expressing host cells in a concentration-dependent manner with an IC50 of 35.8 μM[1].

[1]. Damir Bojadzic, et al. Small-Molecule In Vitro Inhibitors of the Coronavirus Spike-ACE2 Protein-Protein Interaction as Blockers of Viral Attachment and Entry for SARS-CoV-2. bioRxiv, 2020 Oct 22. [2]. Wafaa M Abd El-Rahim, et al. Genotoxicity studies on the removal of a direct textile dye by a fungal strain, in vivo, using micronucleus and RAPD-PCR techniques on male rats. J Appl Toxicol. 2008 May;28(4):484-90.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA
