Cibacron Blue 3G-A

Cat. No.: HY-129042

CAS No.: 84166-13-2

Molecular Formula: $C_{29}H_{20}ClN_7O_{11}S_3$

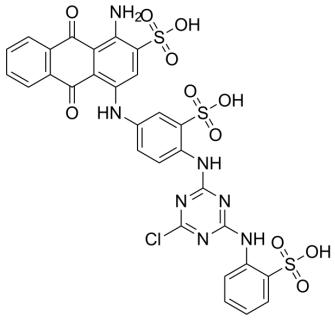
Molecular Weight: 774.16

Target: Fluorescent Dye; Beta-lactamase

Pathway: Others; Anti-infection

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 62.5 mg/mL (80.73 mM; Need ultrasonic)

1M NaOH : 10 mg/mL (12.92 mM; ultrasonic and adjust pH to 12 with NaOH)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.2917 mL	6.4586 mL	12.9172 mL
5 mM	0.2583 mL	1.2917 mL	2.5834 mL
10 mM	0.1292 mL	0.6459 mL	1.2917 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (2.69 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Cibacron Blue 3G-A is an anthraquinone dye, inhibits the R46 β-lactamase with a K_i value of 1.2 uM[1].

IC_{50} & Target

IC50: anthraquinone dye[1]

In Vitro

Cibacron Blue 3G-A is a structural analogy between the dye and NADH, it interacts with (di)nucleotide-dependent enzymes and can be a standard tool for studying their active sites[2].

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

CUSTOMER VALIDATION

- Biochem Biophys Res Commun. 2023 Jul 12, 665, 64-70.

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REFERENCES

[1]. Monaghan C, et al. The interaction of anthraquinone dyes with the plasmid-mediated OXA-2 beta-lactamase.Biochem J. 1982 Aug 1;205(2):413-7.

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